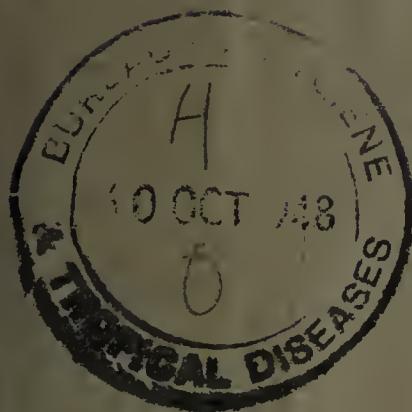


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CITY OF DURBAN



Annual Report

OF

CITY MEDICAL OFFICER

OF HEALTH

YEAR ENDING 30th JUNE, 1947.

HAYNE & GIBSON (PTY) LTD.,
DURBAN





CITY HEALTH DEPARTMENT.

1st August, 1947.

TO HIS WORSHIP THE MAYOR AND
CITY COUNCILLORS OF THE CITY OF DURBAN.

LADIES AND GENTLEMEN,

I have the honour to present the forty-sixth Annual Report of the activities of the City Health Department during the year ending 30th June, 1947.

CLIMATIC DATA. Latitude 30 degrees. Longitude : 31 degrees.

Temperature : (Statistics kindly supplied by the City and Water Engineer) :—

	TEMPERATURE			HUMIDITY			RAINFALL: No. of days rain fell
	Max.	Min.	Mean	Max.	Min.	Mean	
1946 :							
July ...	81	66	72	95	41	73	0.09
August ...	80	64	73	92	58	75	0.22
September...	107	69	76	95	53	74	1.01
October ...	86	64	75	95	45	72	1.95
November...	89	73	79	99	50	83	4.20
December...	89	72	80	91	51	75	4.81
1947 :							
January ...	88	73	80	95	60	78	3.74
February ...	87	80	84	91	60	75	15.18
March ...	87	72	80	91	50	73	4.39
April	87	70	78	100	63	78	6.09
May	84	71	76	89	53	70	0.63
June	81	67	73	94	44	75	3.95

AREA OF MUNICIPALITY. The area of Durban and suburbs inclusive of Townlands is 44,889 acres.

The City is built on ground rising from sea level and backed by hills running north and south, the soil of the valleys being very fertile.

ANNUAL RATEABLE VALUE :

Gross value of land	£31,580,680	(£31,421,430)
Gross value of buildings	£48,416,580	(£36,971,640)
TOTAL (including agricultural and undeveloped areas)	£79,997,260	(£68,393,070)

For the year under review, the rates imposed were 7d. on land and 3½d. on buildings (including water rate).

REPORT "A."

1.—VITAL STATISTICS (Figures in brackets represent the previous year in all cases) :—

POPULATION :

	CENSUS	ESTIMATE 30/6/47			ESTIMATE 30/6/46		
		May, 1946	Male	Female	Total	Male	Female
European	124,792	59,486	67,234	126,720	58,538	66,518	125,056
Coloured	10,206	5,466	5,151	10,617	5,278	4,971	10,249
Native...	108,866	93,427	15,714	109,141	93,530	15,400	108,930
Asiatic...	113,440	59,986	56,842	116,828	58,648	55,253	113,901
	357,304	218,365	144,941	363,306	215,994	142,142	358,136

The principal Vital Statistics for the year, corrected for outward transfer are as follows :—

	European	Coloured	Native	Asiatic	Total
Population (Estimated at 30/6/47)	126,720 (125,056)	10,617 (10,249)	109,141 (108,930)	116,828 (113,901)	363,306 (358,136)
Birth Rates	22.01 (18.42)	54.07 (48.59)	26.71 (25.07)	42.96 (42.59)	31.09 (28.99)
Death Rates	8.50 (9.27)	16.76 (19.32)	24.52 (27.54)	15.14 (16.92)	15.69 (17.55)
Infantile Mortality (Rate per 1,000 live Births)	26.53 (32.50)	81.88 (102.08)	330.36 (359.18)	80.69 (90.83)	131.77 (151.12)
Percentage of Illegitimate to Live Births	2.19 (3.05)	27.77 (31.32)	53.09 (57.77)	1.39 (1.99)	16.26 (18.41)
Death Rate: Pulmonary T.B. per 1,000 of population	.45 (.37)	3.86 (4.29)	3.33 (4.25)	1.60 (2.15)	1.79 (2.23)

BIRTHS. The following births were registered in Durban during the year :—

	European	Coloured	Native	Asiatic	Total
Local Births	2,789 (2,304)	574 (498)	2,915 (2,731)	5,019 (4,851)	11,297 (10,384)
Local Illegitimate Births	61 (82)	159 (156)	1,547 (1,578)	70 (97)	1,837 (1,913)
Still Births	58 (55)	12 (11)	329 (314)	216 (267)	615 (647)
Birth Rates	22.01 (18.42)	54.07 (48.59)	26.71* (25.07)*	42.96 (42.59)	31.09 (28.99)

* This figure is inaccurate and unreliable owing to incomplete registration of births.

Rates of natural increase, being the excess of births over deaths in proportion to the population is as follows :—

European	13.50	(9.9)
Coloured	37.30	(30.9)
Asiatic	27.82	(27.9)

Illegitimacy accounted for 2.19 per cent. of the total European births, 27.77 of Coloured, 53.09 of Native and 1.39 Asiatic.

DEATHS :

	European	Coloured	Native	Asiatic	Total
DEATHS :					
Local Deaths	1,078 (1,159)	178 (198)	2,676 (3,000)	1,769 (1,927)	5,701 (6,284)
Non-Local Residents	224 (241)	28 (20)	1,602 (1,678)	114 (140)	1,968 (2,079)
Death Rates	8.50 (9.27)	16.76 (19.32)	24.52 (27.54)	15.14 (16.92)	15.69 (17.55)
INFANTILE MORTALITY :					
Local Deaths	75 (76)	46 (46)	952 (947)	403 (412)	1,476 (1,481)
Deaths of infants whose mothers came to Durban for confinement or were brought in suffering from illness which caused death	15 (8)	2 (2)	444 (320)	13 (24)	474 (354)

The infantile mortality rate per 1,000 live births for the year was : European 26.53 (32.98), Coloured 81.88 (92.36), Native 330.36 (346.75) and Asiatic 80.69 (84.93).

Causes of death were as follows :—

	European	Coloured	Native	Asiatic	Total
Congenital Causes	5 (12)	3 (11)	153 (232)	67 (67)	228 (322)
Prematurity	37 (27)	8 (11)	73 (44)	52 (46)	170 (128)
Diarrhoea, etc.	6 (10)	16 (9)	374 (291)	86 (79)	482 (389)
Bronchitis, Pneumonia, etc.	7 (8)	13 (7)	184 (263)	151 (147)	355 (425)
Other	20 (19)	6 (8)	168 (117)	47 (73)	241 (217)
	75 (76)	46 (46)	952 (947)	403 (412)	1,476 (1,481)

BIRTHS :

		European	Coloured	Native	Asiatic	Total
BIRTHS :						
Male	...	1,459 (1,198)	301 (268)	1,428 (1,337)	2,478 (2,474)	5,666 (5,277)
Female	...	1,330 (1,106)	273 (230)	1,487 (1,394)	2,541 (2,377)	5,631 (5,107)
INFANTILE DEATHS: ...		MALE ...	42 (43)	30 (25)	477 (536)	224 (209)
Female ...		33 (33)	16 (21)	475 (411)	179 (203)	773 (813) 703 (668)
STILLBIRTHS : ...		Local ...	58 (55)	12 (11)	329 (314)	216 (267)
Imported ...		5 (6)	1 (1)	209 (205)	10 (15)	615 (647) 225 (227)
ILLEGITIMATE BIRTHS :		Local ...	61 (82)	159 (156)	1,547 (1,578)	70 (97)
Imported ...		12 (13)	8 (17)	1,124 (1,099)	2 (6)	1,837 (1,913) 1,146 (1,135)

The following tables indicate the percentage of all deaths in age groups :—

	European			Coloured			Native			Asiatic			TOTAL		
	Male	Fem'le	%	Male	Fem'le	%	Male	Fem'le	%	Male	Fem'le	%	Male	Fem'le	%
Under 1	49	36	7·8	25	17	23·6	543	508	39·2	223	207	24·3	840	768	28·2
1—2	9	4	1·2	7	6	7·3	212	204	15·5	85	76	9·1	313	290	10·6
2—5	8	6	1·3	4	—	2·2	59	63	4·5	53	67	6·8	124	136	4·5
0—5	66	46	10·3	36	23	33·1	814	775	59·2	361	350	40·2	1,277	1,194	43·3
5—15	13	4	1·6	3	5	4·5	41	36	2·9	42	58	5·7	99	103	3·5
15—25	13	11	2·3	8	8	8·9	104	75	6·8	89	109	11·2	214	203	7·3
25—45	63	31	8·7	22	20	23·6	350	170	19·5	103	116	12·3	538	337	15·4
45—65	190	151	31·7	18	13	17·5	170	78	9·2	185	115	17·0	563	357	16·2
Over 65	275	215	45·4	12	10	12·4	38	25	2·4	154	87	13·6	479	337	14·3
Total	620	458	—	99	79	—	1,517	1,159	—	934	835	—	3,170	2,531	—

DEATHS FROM CERTAIN MAIN CAUSES : EUROPEANS : CITY ONLY :

DISEASE		Number of Deaths	Percentage of Total Deaths
Infective intestinal diseases (Enteric Fever, Dysentery, Diarrhoea and Enteritis)		15 (23)	1·4 (1·9)
Cancer	...	118 (169)	10·9 (14·6)
Heart and Circulatory System	...	301 (372)	28·0 (32·1)
Diseases of the Nervous System	...	138 (79)	12·7 (6·8)
Diseases of Birth and Early Infancy	...	50 (53)	4·6 (4·6)
Pneumonia and Bronchitis	...	51 (56)	4·7 (4·8)
Pulmonary Tuberculosis	...	57 (52)	5·2 (4·5)
Other Tuberculosis	...	10 (2)	·9 (·2)
Urinary and Genital Systems	...	53 (71)	4·9 (6·1)

MAIN CAUSES OF DEATH : CITY CASES ONLY :

	European	Coloured	Native	Asiatic
1. Cancer : Site of Disease :				
Oesophagus	3 (10)	— (—)	2 (—)	1 (—)
Stomach and Duodenum	33 (51)	2 (—)	8 (2)	21 (10)
Rectum	12 (11)	— (—)	— (4)	3 (—)
Liver	9 (11)	— (—)	3 (12)	4 (—)
Pancreas	5 (10)	— (—)	— (4)	— (—)
Larynx	2 (3)	— (—)	— (—)	2 (—)
Lung	18 (21)	— (—)	2 (2)	3 (3)
Uterus	1 (12)	— (2)	— (3)	— (2)
Other Female Genital Organs	5 (6)	1 (1)	4 (2)	2 (5)
Breast	17 (13)	1 (2)	1 (4)	6 (1)
Prostate	3 (1)	— (1)	— (1)	3 (—)
Male or Female Genital Organs	— (1)	— (—)	2 (—)	— (—)
Male or Female Urinary Organs	2 (8)	— (—)	2 (1)	— (2)
Skin	— (—)	— (—)	— (—)	1 (—)
Brain and Nervous System	1 (—)	— (—)	— (—)	— (—)
Bones	1 (—)	— (—)	— (—)	— (—)
Other Unspecified Organs	6 (11)	2 (—)	2 (3)	4 (2)
	118 (169)	6 (6)	26 (38)	50 (25)
2. Diseases of the Heart	197 (166)	22 (13)	144 (109)	153 (163)
3. Bronchitis and Pneumonia	50 (56)	24 (18)	402 (580)	425 (485)
4. Influenza	— (3)	— (3)	2 (4)	— (—)
5. Typhoid	— (—)	2 (—)	29 (38)	10 (9)
6. Appendicitis	1 (2)	— (—)	— (2)	— (2)
7. Tuberculosis	67 (57)	45 (45)	423 (512)	205 (261)
8. Diabetes	19 (16)	— (3)	3 (2)	21 (12)
9. Apoplexy	62 (36)	— (3)	21 (16)	32 (31)
10. Diseases of the Kidneys :				
Nephritis	19 (49)	2 (5)	24 (37)	88 (63)
Other Diseases of Kidneys	20 (17)	1 (2)	6 (4)	4 (3)
11. Diseases of the Liver	14 (14)	1 (—)	15 (17)	7 (22)
12. Accidents of Parturition	6 (7)	— (2)	16 (22)	16 (18)
13. Old Age	35 (33)	2 (3)	10 (15)	30 (34)
14. Suicide :				
Poisoning	5 (7)	— (2)	3 (4)	8 (11)
Hanging or Strangulation	1 (4)	— (—)	2 (2)	5 (9)
Drowning	— (9)	— (—)	— (1)	— (3)
Firearms	4 (4)	— (—)	— (—)	— (—)
Cutting or piercing Instruments	4 (—)	— (—)	— (—)	— (—)
Jumping from High Places	1 (—)	— (—)	— (—)	— (—)
Unspecified Means	1 (—)	1 (—)	1 (—)	1 (—)
15. Accidents :				
Railways	1 (6)	— (—)	5 (16)	2 (1)
Motor Driven Vehicles	24 (15)	— (2)	30 (15)	9 (4)
Absorption of Gases	— (—)	— (1)	— (1)	— (1)
Burns	5 (5)	— (4)	7 (14)	29 (34)
Injuries by Firearms	— (—)	— (—)	1 (3)	— (—)
Cutting or Piercing Instruments	— (2)	— (—)	— (1)	— (—)
Fall	5 (12)	2 (1)	10 (11)	4 (2)
Drowning	4 (4)	— (3)	5 (10)	8 (13)
Other	4 (2)	— (—)	23 (5)	3 (1)

DEATHS FROM CANCER IN AGE GROUPS (CITY CASES ONLY) :

	European	Coloured	Native	Asiatic	Total
Under 1	—	—	—	—	—
1—2	—	—	—	—	—
2—5	—	—	—	—	—
5—15	1	—	—	—	1
15—25	—	—	1	2	3
25—45	7	2	11	10	30
45—65	43	2	12	22	79
Over 65	67	2	2	16	87
	118	6	26	50	200

DEATHS IN AGE GROUPS : ENTERIC, MALNUTRITION, DYSENTERY AND ENTERITIS, BRONCHITIS AND PNEUMONIA :

	ENTERIC					MALNUTRITION					DYSENTERY AND ENTERITIS					BRONCHITIS AND PNEUMONIA					
	E	C	N	A	T'tal	E	C	N	A	T'tal	E	C	N	A	T'tal	E	C	N	A	T'tal	
Under 1	—	—	—	—	—	1	2	77	25	105	5	16	402	93	516	9	11	164	155	339	
1—2	—	—	—	—	—	—	1	37	4	42	—	3	162	45	210	4	3	127	65	199	
2—5	—	—	3	1	4	—	—	8	2	10	1	—	46	31	78	—	2	38	60	100	
5—15	—	—	2	2	4	—	—	1	1	2	2	—	2	8	12	—	—	15	26	41	
15—25	—	1	12	6	19	—	—	—	1	1	2	2	—	8	1	11	1	1	12	20	34
25—45	—	1	11	—	12	—	—	—	—	—	2	2	39	5	48	4	3	27	17	51	
45—65	—	—	1	—	1	—	—	—	—	—	3	24	12	39	12	—	14	45	71		
Over 65	—	—	—	1	1	—	1	2	1	4	3	—	4	9	16	19	4	5	37	65	
TOTAL :	—	2	29	10	41	1	4	125	34	164	15	24	687	204	930	49	24	402	425	900	

CAUSES OF DEATH 1946/47 :

Code	CAUSE	BOROUGH				IMPORTED			
		Eur.	Col.	Native	Asiatic	Eur.	Col.	Native	Asiatic
Infective and Parasitic Diseases :									
001	Typhoid Fever	—	2	29	10	—	—	34	8
008	Cerebro Spinal Meningitis	1	1	7	2	—	—	5	—
011	Whooping Cough	—	—	1	1	—	—	—	—
012	Diphtheria	4	2	9	7	—	—	12	2
014	Tetanus	2	—	14	4	1	—	5	—
Tuberculosis of :									
015	Respiratory System	57	41	364	188	12	5	389	21
016	Central Nervous System	3	3	14	3	—	1	7	—
017	Intestines	4	—	24	11	—	—	28	4
018	Vertebral Column	—	—	1	—	—	—	3	—
019	Other Bones and Joints	—	—	1	—	—	—	2	—
023	Other Organs	—	—	3	—	—	—	4	1
024	Miliary	3	1	16	3	1	—	15	1
Dysentery :									
032	Bacillary	2	1	36	12	1	—	22	2
033	Amoebic	1	6	66	13	2	—	56	1
Diseases due to Protozoa :									
036	Malaria	—	—	—	—	1	—	—	—
Diseases due to Spirochaetes :									
042	Aneurysm of the Aorta	1	—	2	—	—	—	1	1
043	Congenital Syphilis	—	—	17	2	—	—	12	—
044	Other Forms	—	3	2	1	—	—	4	—
Diseases due to Filterable Viruses :									
048	Influenza, with resp. Complications	—	—	1	—	—	—	—	—
049	Influenza, without resp. complications	—	—	1	—	—	—	1	—
052	Measles	—	—	4	2	—	—	2	—
054	Acute lethargic Encephalitis	—	—	—	1	—	—	—	—
064	Typhus—Tickborne	—	—	—	—	1	—	—	—
Diseases due to Helminths :									
071	Bilharzia	—	—	—	1	—	—	1	—
Other Infective or Parasitic Diseases :									
075	Pernicious Lymphogranulomatosis	1	—	—	—	—	—	—	—
Cancer and other Tumours :									
100	Pharynx	—	—	—	—	1	—	—	—
101	Oesophagus	3	—	2	1	1	—	3	—
102	Stomach and Duodenum	33	2	8	21	14	—	5	1
103	Rectum	12	—	—	3	3	—	2	—
104	Liver	9	—	3	4	4	—	10	—
105	Pancreas	5	—	—	—	—	1	1	—
107	Larynx	2	—	—	2	1	1	—	—
109	Lung	18	—	2	3	3	—	—	—
110	Uterus	1	—	—	—	1	—	1	—
111	Other Female Genital Organs	5	1	4	2	1	—	7	—
112	Breast	17	1	1	6	1	1	—	—
113	Prostate	3	—	—	3	1	—	1	—
114	Other Male Genital Organs	—	—	2	—	—	—	—	—
115	Male or Female Urinary Organs	2	—	2	—	—	—	1	—
116	Skin	—	—	—	1	—	—	—	—
117	Brain and Nervous System	1	—	—	—	—	—	—	—
118	Bones	1	—	—	—	—	—	—	—
119	Other Unspecified Organs	6	2	2	4	1	—	4	—
135	Tumour of the Brain	1	—	1	1	2	—	1	—
Rheumatism and other general Diseases :									
149	Acute Rheumatic Fever	3	—	1	3	—	—	—	—
150	Chronic Rheumatism	—	—	—	1	—	—	2	—
152	Diabetes	19	—	3	21	1	—	2	2
162	Osteomalacia	—	—	—	1	—	—	—	—
163	Malnutrition	1	4	125	34	—	1	147	3
164	Other General Diseases	—	—	2	—	—	—	—	—
167	Beri Beri	—	—	1	1	—	—	2	—
168	Pellagra	—	—	6	1	—	—	—	1
169	Rickets	—	—	1	—	—	—	—	—
Diseases of the Blood :									
202	Unspecified Haemorrhage Conditions	—	—	—	1	—	—	—	—
203	Pernicious Anaemia	2	—	—	2	—	—	2	—
206	Unspecified Anaemias	1	—	2	2	1	—	2	—
207	Leukaemia	3	1	—	—	1	—	2	—
209	Splenic Anaemia	1	—	—	—	—	—	—	—
210	Banti's Disease	1	—	—	—	—	—	—	—
211	Other Diseases of the Spleen	—	—	—	—	—	—	1	—
Chronic Poisoning and Intoxication :									
251	Chronic Alcoholism	—	—	—	—	1	—	3	—
258	Unspecified Poisoning	4	—	2	2	—	—	—	1

Code	CAUSE	BOROUGH				IMPORTED			
		Eur.	Col.	Native	Asiatic	Eur.	Col.	Native	Asiatic
Diseases of the Nervous System :									
303	Meningitis—Other Forms	1	2	8	11	—	—	9	—
304	Disseminated Sclerosis	1	1	—	1	—	—	1	—
305	Cerebral Haemorrhage	62	—	21	32	6	1	2	1
306	Cerebral Embolism and Thrombosis	70	2	3	29	7	—	4	3
307	Hemiplegia	1	—	—	8	1	—	—	—
309	Epilepsy	2	—	7	1	—	—	1	1
310	Convulsions	1	—	4	3	1	—	1	—
317	Diseases of the Mastoid Process	—	—	—	1	—	—	—	1
Diseases of the Circulatory System :									
350	Chronic Pericarditis (Rheumatic)	—	—	1	—	—	—	1	—
351	Other Pericarditis	—	—	2	—	—	—	—	—
352	Acute Endocarditis (Non-Rheumatic)	2	1	1	6	—	—	—	—
353	Valvular Disease (Rheumatic)	1	—	1	—	—	—	—	—
354	Valvular Disease (Non-Rheumatic)	—	—	—	—	—	—	1	—
355	Acute Myocarditis	3	—	2	1	—	—	—	—
356	Chronic Myocarditis (Rheumatic)	5	—	2	13	—	—	4	1
357	Other Chronic Myocarditis	180	21	132	130	31	3	74	5
358	Diseases of Coronary Arteries	4	—	—	—	—	—	—	—
359	Heart Disease, specified as Rheumatic	1	—	—	1	—	—	—	—
360	Heart Disease (Non-Rheumatic)	1	—	3	2	3	—	6	—
361	Aneurysm	1	—	2	—	—	—	2	—
362	Arterio Sclerosis	45	3	8	24	7	—	4	1
363	Gangrene	1	—	—	—	—	—	—	—
364	Other Diseases of the Arteries	5	1	7	—	—	—	3	—
366	Diseases of the Lymphatic System	1	—	2	—	—	—	—	—
367	High Blood Pressure	—	—	—	1	—	—	—	—
368	Hypertension	51	4	17	38	12	2	23	2
Diseases of the Respiratory System :									
400	Diseases of the Nasal Fossae and Annexa	1	—	—	1	—	—	2	—
402	Acute Bronchitis	4	4	8	71	1	—	—	—
403	Chronic Bronchitis	1	2	2	22	1	—	1	—
404	Broncho Pneumonia	35	17	327	262	9	1	129	5
405	Lobar Pneumonia	9	1	65	70	1	2	26	1
406	Unspecified Pneumonia	1	—	—	—	—	—	—	—
407	Empyema	1	—	—	—	—	—	—	—
408	Unspecified forms of Pleurisy	—	—	1	—	—	—	—	—
409	Pulmonary Embolism	41	3	20	17	14	—	17	—
410	Congestion of the Lungs	4	—	3	3	2	—	5	1
411	Asthma	14	—	3	24	4	—	4	—
412	Pulmonary Emphysema	4	—	—	1	—	—	1	—
413	Miners Phthisis (without Tuberculosis)	—	—	—	—	—	—	1	—
416	Gangrene of the Lungs	2	—	—	—	—	—	—	—
417	Abscess of the Lungs	1	—	5	2	—	—	2	—
418	Other Diseases of the Respiratory System	—	—	1	—	1	—	1	—
Diseases of the Digestive System :									
455	Ulcer of the Stomach	—	—	—	—	—	—	1	—
456	Ulcer of the Duodenum	6	—	—	1	1	—	1	—
457	Other Diseases of the Stomach	1	—	1	—	1	—	—	—
458	Gastro Enteritis (under 2 years)	8	16	549	147	2	1	205	2
459	Gastro Enteritis (2 years and over)	4	1	36	32	—	—	14	—
460	Ulceration of the Intestines	2	—	—	—	—	—	—	—
461	Appendicitis	1	—	—	—	1	—	1	—
462	Hernia	1	—	1	—	—	—	—	—
463	Intestinal Obstruction	4	—	9	2	1	—	6	1
467	Cirrhosis of Liver (without Alcoholism)	6	—	3	1	1	—	1	1
466	Cirrhosis of Liver (with Alcoholism)	5	—	3	3	1	—	5	1
468	Acute Yellow Atrophy of Liver	2	—	1	1	—	1	—	—
469	Other Diseases of Liver	1	1	8	2	2	—	6	—
472	Diseases of the Pancreas	2	—	—	—	—	—	—	—
473	Peritonitis	4	—	22	11	—	1	15	1
Diseases of the Urinary and Genital Systems :									
500	Acute Nephritis	10	1	12	42	2	—	7	1
501	Chronic Nephritis	9	1	12	46	3	—	10	—
503	Pyelitis and Pyelonephritis	7	—	1	2	1	—	6	—
504	Other Diseases of the Kidneys	13	1	5	2	1	—	4	2
507	Other Diseases of the Bladder	—	—	1	1	1	—	—	—
506	Cystitis	1	—	—	—	—	—	—	—
508	Diseases of the Urethra	6	—	2	—	—	—	2	1
510	Diseases of the Prostate	2	—	1	—	2	—	1	—
511	Diseases of Male Genital Organs	4	—	—	—	—	—	—	—
512	Diseases of the Ovaries and Fallopian Tubes	—	—	1	—	—	—	1	—
515	Other Diseases of Female Genital Organs	1	—	—	1	1	—	1	—

Code	CAUSE	BOROUGH				IMPORTED			
		Eur.	Col.	Native	Asiatic	Eur.	Col.	Native	Asiatic
552	Diseases of Pregnancy :								
	Spontaneous abortion of unspecified Origin	—	—	1	1	—	—	1	1
554	Ectopic Gestation	—	—	1	—	—	—	—	—
557	Unspecified Haemorrhage of Pregnancy	1	—	2	1	—	—	—	—
558	Eclampsia of Pregnancy	—	—	—	1	—	—	1	—
561	Other Toxaemias of Pregnancy	—	—	1	1	—	—	1	—
562	Other Accidents of Pregnancy	—	—	1	—	—	—	—	—
565	Haemorrhages during Childbirth	1	—	2	—	—	—	—	—
566	Haemorrhages after Childbirth	—	—	1	—	—	—	—	—
574	Other Accidents of Childbirth	4	—	7	12	1	—	4	3
601	Diseases of the Skin and Cellular Tissue :								
	Cellulitis	1	1	6	1	—	—	2	—
650	Diseases of the Bones and Organs of movement :								
	Osteomyelitis	—	—	—	—	—	—	—	1
651	Other Diseases of the Bones	—	—	1	—	—	—	1	—
653	Diseases of other Organs of Movement	1	—	—	—	1	—	—	—
702	Congenital Malformations :								
	Congenital malformation of the Heart	—	1	1	—	—	—	—	—
706	Imperforate anus	—	—	—	1	1	—	—	—
709	Unspecified Malformations	—	—	1	1	—	—	1	—
750	Diseases peculiar to first year of life :								
	Congenital Debility	7	4	148	57	—	—	32	2
751	Premature Birth	36	3	91	54	4	2	29	1
752	Intracranial haemorrhage (Birth Injury)	3	—	17	3	2	3	6	—
753	Other Birth Injuries	—	—	—	—	—	—	1	—
754	Asphyxia, during and after Birth	—	—	2	—	—	—	—	—
758	Other specified Diseases	4	2	19	11	1	—	13	2
800	Senility, Old Age :								
	Senility	35	2	10	30	11	1	12	2
850	Violent or Accidental Deaths : Suicide :								
	Poisoning—Corrosive Substances	5	—	3	8	—	—	—	1
856	Hanging or Strangulation	1	—	2	5	1	—	—	—
858	Firearms	4	—	—	—	—	—	—	—
859	Cutting or Piercing Instruments	4	—	—	—	—	—	—	—
860	Jumping from high places	1	—	—	—	—	—	—	—
863	Other or unspecified means	1	1	1	1	—	—	—	—
864	Homicide :								
	Infanticide	—	—	1	—	—	—	—	—
865	Firearms	—	—	2	—	2	—	1	—
866	Cutting or piercing instruments	2	2	65	10	—	—	17	—
867	Unspecified means	—	—	2	—	—	—	2	—
868	Accidental Deaths :								
	Accidents on Railways	1	—	5	2	2	—	3	—
871	Motor Car Accidents	24	—	30	9	7	—	16	1
873	Motor Cycle Collisions with Trams	—	—	1	—	—	—	—	—
874	Other Motor Cycle Accidents	—	—	1	—	—	—	—	—
877	Other Accidents—Pedal Cycles	—	1	2	2	—	—	3	—
881	Accidents in Quarries	—	—	2	—	—	—	—	—
886	Accidents caused by Machinery	—	—	4	1	—	—	—	—
889	Accidental Poisoning	—	—	—	1	—	—	1	1
891	Accidental burns	5	—	7	29	—	—	13	4
892	“ mechanical suffocation	2	—	1	—	—	—	—	—
893	“ drowning	4	—	5	8	4	—	2	—
894	“ injury by firearms	—	—	1	—	—	—	—	—
896	“ injury by fall	5	2	10	4	1	—	2	1
897	“ Injury by landslide	1	—	8	—	—	—	3	—
903	Lightning	—	—	2	—	—	—	1	—
906	Anaesthetic Accidents	—	—	—	—	—	—	1	—
904	Accidents due to Electric currents	1	—	2	—	—	—	—	—
907	Lack of care of the new born	—	1	—	—	—	—	—	—
916	Open Verdict	3	1	5	1	—	—	1	—
950	Sudden Death	2	—	1	—	1	—	23	12
951	Ill defined causes	29	3	93	65	6	—	—	—
	TOTALS	1,078	178	2,676	1,769	224	28	1,602	114

INFECTIOUS DISEASES NOTIFIED DURING THE YEAR :

		European	Coloured	Native		Asiatic
(i)	Enteric or Typhoid Fever :					
	Local Cases ...	14	(18)	21	(7)	108 (113)
	Imported Cases ...	7	(21)	2	(1)	71 (122)
	Local Deaths...	—	(—)	2	(—)	29 (38)
	Imported Deaths ...	—	(—)	—	(—)	34 (34)
(ii)	Cerebro Spinal Meningitis :					
	Local Cases ...	5	(10)	2	(1)	9 (26)
	Imported Cases ...	—	(1)	—	(1)	2 (8)
	Local Deaths...	1	(—)	1	(—)	7 (1)
	Imported Deaths ...	—	(—)	—	(—)	5 (1)
(iii)	Scarlet Fever :					
	Local Cases ...	72	(99)	3	(1)	10 (1)
	Imported Cases ...	10	(12)	—	(—)	— (5)
	No Deaths recorded					
(iv)	Diphtheria :					
	Local Cases ...	156	(154)	24	(17)	110 (64)
	Imported Cases ...	28	(39)	3	(2)	56 (33)
	Local Deaths...	4	(7)	2	(1)	9 (7)
	Imported Deaths ...	—	(—)	—	(—)	12 (5)
(v)	Erysipelas :					
	Local Cases ...	20	(10)	1	(—)	2 (2)
	Imported Cases ...	3	(4)	—	(—)	1 (2)
	No Deaths recorded.					
(vi)	Poliomyelitis :					
	Local Cases ...	2	(3)	2	(1)	2 (3)
	Imported Cases ...	—	(2)	—	(—)	1 (1)
	Local Deaths...	—	(2)	—	(—)	— (2)
	Imported Deaths ...	—	(—)	—	(—)	— (1)
(vii)	Gon Ophthalmia :					
	Local Cases ...	—	(—)	—	(—)	14 (12)
	Imported Cases ...	—	(—)	—	(—)	1 (—)
	No Deaths recorded.					
(viii)	Leprosy :					
	Local Cases ...	—	(—)	—	(—)	6 (5)
	Imported Cases ...	—	(—)	—	(—)	3 (4)
	No Deaths recorded.					
(ix)	Puerperal Sepsis :					
	Local Cases ...	2	(4)	2	(1)	2 (5)
	Imported Cases ...	—	(—)	—	(—)	— (2)
	Local Deaths...	—	(1)	—	(—)	1 (—)
	Imported Deaths ...	—	(—)	—	(—)	1 (—)
(x)	Trachoma :					
	Imported Cases ...	—	(3)	—	(—)	1 (1)
	No Deaths recorded.					
(xi)	Typhus :					
	Local Cases ...	2	(11)	—	(—)	2 (—)
	Imported Cases ...	1	(9)	—	(—)	2 (1)
	Imported Deaths ...	—	(—)	—	(—)	— (1)
(xii)	Encephalitis :					
	Local Cases ...	1	(—)	—	(1)	— (4)
	Imported Cases ...	—	(1)	—	(—)	1 (—)
	Local Deaths...	—	(2)	—	(—)	1 (—)
	Imported Deaths ...	—	(—)	—	(—)	— (1)
(xiii)	Smallpox :					
	Local Cases ...	—	(—)	—	(—)	— (6)
	Imported Cases ...	—	(1)	—	(—)	— (12)
	Local Deaths...	—	(—)	—	(—)	— (2)
	Imported Deaths ...	—	(—)	—	(—)	— (2)
(xiv)	Relapsing Fever :					
	Imported Cases ...	—	(—)	—	(—)	— (1)
	No Deaths recorded.					
(xv)	Ophthalmia Neonatorum :					
	Local Cases ...	7	(16)	14	(4)	61 (62)
	Imported Cases ...	—	(—)	—	(—)	— (1)
	No Deaths recorded.					
(xvi)	Amoebic Dysentery :					
	Local Cases ...	633	(760)	108	(45)	1638 (1419)
	Imported Cases ...	58	(185)	5	(7)	850 (538)
	Local Deaths...	1	(1)	6	(4)	66 (116)
	Imported Deaths ...	2	(—)	—	(—)	56 (70)
(xvii)	Polioencephalitis :					
	Local Cases ...	—	(1)	—	(—)	— (—)
	No Deaths recorded.					
(xviii)	Malaria :					
	Local Cases ...	1	(—)	—	(—)	— (—)
	Imported Cases ...	4	(—)	1	(—)	1 (—)
	Imported Deaths ...	1	(—)	—	(—)	— (—)
(xix)	Tickbite Fever :					
	Local Cases ...	1	(—)	—	(—)	— (—)
	Imported Deaths ...	1	(—)	—	(—)	— (—)

(a) DEATH AND INCIDENCE RATES PER 1,000 OF THE POPULATION FOR ENTERIC AND DIPHTHERIA.

	European		Coloured		Native		Asiatic		All Races		Non-Eur.	
	D.R.	I.R.	D.R.	I.R.	D.R.	I.R.	D.R.	I.R.	D.R.	I.R.	D.R.	I.R.
Enteric :												
1946	—	·14	—	·68	·37	1·04	·09	·34	·14	·49	·14	·66
1947	—	·11	·19	1·98	·26	·99	·09	·57	·11	·57	·17	·83
Diphtheria :												
1946	·07	1·23	·10	1·66	·07	·59	·09	·33	·07	·76	·09	·51
1947	·03	1·23	·19	2·26	·08	1·00	·06	·39	·06	·93	·08	·80

D.R. : Death Rate. I.R. : Incidence Rate.

(b) INFECTIOUS DISEASES ADMITTED TO THE CITY FEVER HOSPITAL, CONGELLA, DURING THE YEAR :

Cerebro Spinal Meningitis	...	...	6	(8)	Scarlet Fever and Suspects	...	...	...	76	(95)
Chickenpox	...	...	21	(67)	Smallpox	...	...	...	—	(25)
Diphtheria	...	...	210	(211)	„ (contacts)	...	...	...	2	(20)
Gonococic infection	...	...	—	(3)	„ (suspects)	...	...	...	3	(13)
Measles and Suspects	...	...	84	(29)	Trachoma	...	...	...	—	(2)
Mumps	...	...	25	(21)	Typhus and Suspects	...	...	...	9	(9)
Pertusis	...	...	8	(3)	Typhoid and Suspects	...	...	...	84	(—)
Rubella	...	...	3	(6)	Whooping Cough and Suspects	...	...	...	5	(8)

TOTAL : 536 (520).

(c) AMBULANCE REMOVALS :

	European	Coloured	Native	Asiatic	Total
City Fever Hospital	370 (391)	84 (—)	3 (11)	2 (6)	459 (408)
Government Hospitals	50 (57)	148 (128)	540 (378)	192 (125)	930 (688)
Other Hospitals	79 (56)	109 (85)	634 (235)	352 (204)	1,174 (580)
	499 (504)	341 (213)	1,177 (624)	546 (335)	2,563 (1,676)

(d) DISINFECTING STATION AND LAUNDRY :

Municipal Departments :

City Fever Hospital	...	...	Disinfections	...	...	31,447	(44,227)
City Fever Hospital	...	...	Articles Laundered	...	...	176,407	(114,848)
City Baths	...	...	Articles Laundered	...	...	48,147	(57,860)
Ocean Beach	...	...	Articles Laundered	...	...	36,394	(44,052)
Other Departments	...	...	Articles Laundered	...	...	111,308	(104,156)
						403,703	(365,143)

(e) (i) Routine :

Private Premises	...	...	Articles Disinfected	...	...	65,464	(85,978)
Private Premises	...	...	Rooms Disinfected	...	...	2,741	(3,641)
City Fever Hospital	...	...	Cubicles Disinfected	...	...	780	(—)

(ii) Contracts :

Child Welfare Society	...	...	Articles Laundered	...	...	5,824	(6,483)
Durban Turf Club	...	...	Articles Disinfected	...	...	3,607	(3,888)
Entabeni Nursing Home	...	...	Articles Disinfected	...	...	135,902	(217,650)
Indian Depot Hospital	...	...	Articles Laundered	...	...	52,746	(59,574)
King Edward VIII Hospital	...	...	Articles Laundered	...	...	1,331,033	(1,295,421)
King Edward VIII Hospital	...	...	Articles Disinfected	...	...	53,041	(50,232)
King George V Hospital	...	...	Articles Laundered	...	...	264,886	(148,165)
S.A.W.A.S. Club	...	...	Articles Laundered	...	...	—	(164,034)
						1,916,024	2,035,066

TUBERCULOSIS :

(1) STATISTICS :

		European	Coloured	Native	Asiatic	TOTAL				
(a) Notifications :										
(i) Pulmonary :										
Local	153	(118)	122	(66)	944	(945)	429	(527)	1,648	(1,656)
Imported	12	(53)	8	(5)	770	(820)	43	(58)	833	(936)
(ii) Non-Pulmonary :										
Local	15	(2)	11	(10)	99	(55)	37	(32)	162	(99)
Imported	1	(—)	1	(—)	173	(102)	25	(5)	200	(107)
(b) Deaths :										
(i) Pulmonary :										
Local	57	(47)	41	(44)	364	(461)	188	(245)	650	(797)
Imported	12	(10)	5	(4)	389	(361)	21	(29)	427	(404)
(ii) Non-Pulmonary :										
Local	10	(10)	4	(1)	59	(51)	17	(16)	90	(78)
Imported	1	(4)	1	(2)	59	(29)	6	(1)	67	(36)

TUBERCULOSIS : ALL FORMS : NOTIFICATIONS AND DEATHS IN AGE GROUPS (CITY CASES ONLY) :

AGE	NOTIFICATIONS					DEATHS				
	Europ.	Col.	Native	Asiatic	Total	Europ.	Col.	Native	Asiatic	Total
0—5	9	18	125	63	215	6	1	61	17	85
5—10	3	7	31	31	72	3	3	16	3	25
10—15	5	5	33	29	72	2	2	16	9	29
15—20	14	17	89	80	200	1	4	23	31	59
20—25	13	25	130	59	227	3	4	45	42	94
25—30	28	10	177	63	278	2	7	61	24	94
30—35	10	5	89	42	146	7	4	30	19	60
35—40	23	13	129	36	201	6	6	58	19	89
40—45	11	6	84	17	118	5	4	31	11	51
45—50	11	10	71	16	108	7	7	34	9	57
50—55	12	5	20	10	47	6	—	12	7	25
55—60	12	6	33	9	60	6	1	20	4	31
60—65	10	3	13	6	32	4	1	6	7	18
Over 65	7	3	19	5	34	9	1	10	3	23
TOTALS :	168	133	1,043	466	1,810	67	45	423	205	740
	(120)	(76)	(1,000)	(559)	(1,755)	(57)	(45)	(512)	(261)	(875)

TUBERCULOSIS : DEATH AND NOTIFICATION RATES PER 1,000 OF THE POPULATION : (CITY CASES ONLY) :

	European		Coloured		Native		Asiatic		All Races		Non-Eur.	
	Death Rate	Notification Rate										
Pulmonary												
194637	.94	4.29	6.44	4.25	8.71	2.15	4.63	2.23	4.62	3.22	6.60
194745	1.21	3.86	11.49	3.33	8.65	1.60	3.67	1.79	4.54	3.51	6.32
Non-Pulmonary :												
194601	.08	.10	.98	.47	.55	.15	.29	.22	.28	.21	.41
194708	.12	.37	1.03	.54	.91	.15	.32	.22	.44	.38	.69
All Forms :												
194638	.95	4.39	7.42	4.72	9.26	2.30	4.92	2.45	4.90	3.43	7.01
194753	1.33	4.23	12.52	3.87	9.56	1.75	3.99	2.01	4.99	2.89	7.01

City :	EUROPEANS										COLOURED										ASIATICS									
	1941	1942	1943	1944	1945	1946	1947	1941	1942	1943	1944	1945	1946	1947	1941	1942	1943	1944	1945	1946	1947	1941	1942	1943	1944	1945	1946	1947		
Notifications	84	74	98	114	131	118	153	34	47	55	60	105	66	122	424	424	593	862	952	945	944	235	249	325	410	453	527	429		
Notification Rate per 1,000	.90	.70	.93	1.05	1.19	.94	1.21	4.12	5.55	6.43	6.84	11.66	6.44	11.49	5.94	5.72	8.08	11.92	13.25	8.67	8.65	2.62	2.70	3.73	4.24	4.57	5.63	3.67		
Deaths	41	34	39	43	42	47	57	35	33	38	46	43	44	41	256	225	227	366	446	461	364	212	182	174	232	233	245	188		
Death Rate per 1,000 ...	.44	.32	.36	.39	.38	.45	.24	3.89	4.44	5.24	4.29	4.78	4.29	3.86	3.53	3.03	3.98	5.06	6.21	4.23	3.33	2.36	1.97	1.84	2.40	2.19	2.15	1.61	
Imported :																														
Notifications	18	27	206	94	53	53	12	2	2	12	10	19	5	8	7	66	537	661	667	820	770	7	75	78	53	58	43			
Deaths	17	27	20	18	14	10	12	7	18	4	9	1	4	5	303	263	196	389	361	314	287	314	389	22	38	39	20	22	29	21

NON-PULMONARY TUBERCULOSIS.

City :	EUROPEANS										COLOURED										ASIATICS									
	1941	1942	1943	1944	1945	1946	1947	1941	1942	1943	1944	1945	1946	1947	1941	1942	1943	1944	1945	1946	1947	1941	1942	1943	1944	1945	1946	1947		
Notifications	5	6	1	1	10	2	15	3	9	2	2	7	10	11	62	32	45	34	88	55	99	42	39	19	19	41	32	37		
Notification Rate per 1,000	.05	.06	.01	.01	.09	.01	.12	.36	1.08	.23	.23	.77	.97	1.03	.87	.61	.47	.47	1.22	.50	.91	.47	.42	.20	.19	.41	.28	.31		
Deaths	—	2	4	5	1	10	10	1	2	3	6	6	1	4	6	21	28	49	40	51	59	19	17	36	22	25	16	17		
Death Rate per 1,000 ...	—	—	.02	.04	.05	.01	.08	.08	.12	.23	.35	.69	.66	.09	.38	.67	.55	.47	.54	.21	.18	.38	.24	.25	.25	.14	.14			
Imported :																														
Notifications	2	2	23	—	1	3	4	1	—	1	—	—	1	1	1	1	3	2	43	82	175	102	127	—	—	4	7	7	5	25
Deaths	—	4	2	2	1	3	4	1	—	1	1	1	1	1	1	1	13	38	29	34	39	29	59	1	2	1	2	5	1	6

TUBERCULOSIS :

City Health (Tuberculosis) Clinic. The previous Annual Report recorded the earlier history of this Clinic.

Early in September, 1946, the first Clinic session was held, under a temporary arrangement whereby the Medical Superintendent of King George V Hospital undertook to provide the medical, radiological and radiographical staff, whilst the City Health Department agreed to provide the clerical and health visiting staff.

To begin with, one Clinic session and one artificial-pneumothorax clinic were held each week. As the numbers of patients increased, it became necessary to increase the ordinary Clinic sessions to two per week. The Clinics are confined, so far, to European and Coloured patients.

This temporary working arrangement between the Union Health Department and the Durban Corporation will remain until finality is reached in the negotiations for transferring the Clinic to the Government and also possibly absorbing into the Civil Service those members of the City Health Department who are engaged in tuberculosis work.

At a meeting between the Secretary for Health and the City Council in June, 1947, regarding the question of transfer of staff, it was arranged that in this connection a Senior Staff Clerk from the Union Health Department would confer with the Durban Corporation upon the details concerned in the proposed transfer of staff. This conference duly took place in August, 1947, when the Union Health Department's representative undertook to place the whole question of staff in the hands of the Public Services Commission. There the matter rests.

The year has ended without finality having been reached, as a result of which the Clinic is not being used on a whole-time basis nor for all intended purposes.

In May 1947, the 35 mm. camera unit of the X-Ray set was replaced by a 70 mm. apparatus.

Present Clinic Facilities. At the present time, the following Tuberculosis Clinics are functioning :—

Name of Clinic	Races	Total Annual Attendances
City Health Clinic	Europeans	2,284
	Coloureds	946
McCord Hospital Clinic...	Natives	2,343
	Asiatics	3,707
		<hr/>
		TOTAL : 9,280

In addition to the above official Clinics, unofficial Clinics have been held throughout the year at King George V Hospital and Springfield Hospital, for all races and these have been of very great assistance in coping with this City's requirements.

All the above-named Clinics include artificial-pneumothorax sessions.

It is proposed to instal, in the very near future, an X-Ray set at the Native Administration Department so that the ordinary medical examination of Natives appearing for registration may be supplemented by the use of diagnostic chest X-Rays. The X-Ray set has been ordered and is likely to arrive very soon.

Tuberculosis Hospital Accommodation. Previous Annual Reports have consistently referred to the hopeless inadequacy of hospital accommodation for Tuberculosis patients in Durban.

Last year's report stressed the need, in planning additional hospital beds, to provide for an almost equal number of beds in Durban for both City and Imported cases, with particular reference to Native cases. It was assessed that, in all, nearly 2,000 beds were needed in Durban to meet all requirements.

At that time the total number of available beds, for all races, in and around Durban, was approximately 350. Due to strenuous efforts on the part of the Union Health Department, which has been training Bantu nurse-aides, and gradually acquiring additional wards at Springfield ex-military hospital, it is gratifying to be able to report that the total number of Tuberculosis beds in Durban has now been increased to approximately 1,000 and that additional beds are expected to be available in the near future.

The total number of beds occupied in and near Durban by Tuberculosis patients, both City and Imported cases, is computed as follows :—

Hospital	Races Admitted	No. of Beds
King George V Hospital	European	140
Springfield Hospital...	Coloured, Native, Asiatic ...	682
Indian Immigration ...	Native, Asiatic	62
St. Aidan's	Asiatic	14
Umlazi Mission	Coloured, Native, Asiatic ...	115
F.O.S.A. Settlement... ...	Asiatic	56
		<hr/>
		1,069

Approximately one-half of these in-patients are Durban residents.

In addition to the above, occasional cases are admitted to Nelspoort Sanatorium and Springkell Hospital. Also there are a number of non-European cases in King Edward VIII Hospital and European cases in Addington Hospital awaiting transfer to Tuberculosis institutions.

Vital Statistics. Death rates for the three non-European races show a definite decline as compared with the previous year, whilst in the case of Europeans there is a distinct rise.

It is difficult to account for this rise in the European death rate. The lowered rates for the other three races are probably due to two causes : firstly, a much larger number of 'open' cases are being isolated in hospital, and secondly, facilities for the detection and prompt treatment of cases in the early stages of the disease have been greatly improved.

Attached are vital statistics covering the last seven years which refer to all races, differentiate between City and Imported cases and between Pulmonary and non-Pulmonary disease.

Also shown are the number of notifications and deaths per year and, in the case of City patients, the annual notification rates and deaths rates per one thousand of the population.

Distinction between City and Imported cases is necessary for statistical, public health and financial reasons. For the sake of simplicity, this distinction is based on the period of residence. Any patient who has resided in Durban for a period of not less than six months is regarded as a 'bona fide' Durban resident and therefore as the liability of this local authority. Such patients are designated 'City cases' and all others as 'Imported cases.'

Different cities use different domiciliary 'yardsticks' leading to arguments between local authorities on the question of financial liability, which could be obviated if the Public Health Act were amended to define 'domicile' in the case of Tuberculosis.

The most reliable index of the progress of the disease, year by year, is the Death Rate. In this regard, it will be noticed that the Native death rate from Pulmonary Tuberculosis steadily increased until the last two years when a substantial decline from 6.21 in 1945 to 3.33 in 1947 occurred. This rate of decline is promising, but it is possible that statistics between the years 1936 and 1946, the two census years, may not be reliable, as the population during the intervening years were merely estimated figures. This view appears to be borne out if one noted that the number of deaths amongst City cases for the years 1945 and 1946 respectively were 446 and 461, whereas the death rates per 1,000 for the same two years were 6.21 and 4.23. Furthermore, during recent years, there has been an increase in the number of City cases who have returned to their kraals where they must have, in most cases, died, and it is probable that such deaths were regarded as 'rural' deaths and therefore not referred to Durban for correction of statistics.

Epidemiological Control re Native Cases. Some years ago, the Native waiting list for admission to hospital was comparatively small. Natives were then admitted to both King Edward VIII Hospital and McCord's Hospital. Recently, King Edward VIII Hospital revised its policy and now no longer admits diagnosed cases, although numerous in-patients are eventually diagnosed as Tuberculosis cases, when they are transferred to Springfield or other hospitals.

During the last few years, this Department has adopted the policy of investigating the home-contacts and work-contacts of most, if not all, Native cases. This procedure led to the discovery of many new cases. Some are admitted to the wards direct from the clinics, whilst others are placed on the waiting list for admission.

The recent opening of additional wards at Springfield Hospital reduced the number of cases on the waiting list to a minimum, but only temporarily. As soon as these beds were filled, the waiting list lengthened again.

The waiting list of Native cases in Durban itself, however, never reaches formidable proportions, because if no hospital bed is available, when diagnosis is made, Native patients usually return to their kraals. They cannot, in most instances, do otherwise because their employers are unwilling to allow them to reside with their other employees.

This, again, illustrates the need for more hospital accommodation either in Durban itself or in the rural areas, or preferably both.

Realising the financial and other hardships caused to these waiting-list cases, the City Council some years has adopted two measures calculated to bring some relief :—

- (1) The Council pays to the patient, through the care-committee of the Natal Anti-Tuberculosis Association, the equivalent of what would be its share of the hospital fees while the patient is waiting in Durban for admission to hospital ; and
- (2) Any 'City' Native who is unable to obtain a hospital bed, and who therefore requires to return to his kraal, is provided with his train ticket if he is unable to afford travelling expenses.

Many Natives leave hospital against medical advice, many hundreds each year, and return to their kraals, in consequence of which this Department wrote to all hospitals requesting that the Department be informed, in advance, if possible, so that measures might be taken in terms of Section 25 and 29 of the Public Health Act for the forcible detention in hospital of such cases. Advice from the hospitals, however, usually arrives too late.

To press this procedure and detain all such cases in hospital is hardly practicable, for the following reasons :

- (a) Considerable continual assistance from the Police would be required, and the force is under-staffed as it is ;
- (b) While there is a shortage of beds, it is usually better for all concerned that these beds be occupied by willing and co-operative patients instead of by those detained in hospital by force ;
- (c) Hospital authorities deprecate the creation of a 'police atmosphere' in the hospitals; and
- (d) Even though it may be legally correct to compel cases to remain in hospital in Durban until they die, many consider that it is morally wrong to sever all opportunities these patients have of seeing their families before they die. Rural hospitals at focal points offer a solution of this difficulty.

One of the main reasons why Native cases leave hospital is anxiety regarding the financial welfare of their families at home. Provided patients obtain adequate paid sick-leave or, alternatively, receive suitable Government or other grants, many can be persuaded to remain in hospital.

Realising the public health dangers to which rural Natives are exposed when Tuberculosis cases return to their homes, this Department and the Union Health Department some years ago came to an arrangement whereby, whenever a patient leaves any hospital, a specified 'Discharge from Hospital Form' is forwarded to the City Health Department. In the case of the patients who leave Durban, particulars regarding the patient's medical condition and home address are forwarded to the Union Health Department to enable that Department to take whatever measures it considers advisable for the safeguarding of the public health at the patient's place of domicile.

Incidentally, some such Discharge Form should be obligatory in law, so that a local authority may be made immediately aware of the discharge of the patient and therefore enabled to take whatever measures circumstances may dictate.

Tuberculosis Staff and Activities : General Comments. Numerically, the staff engaged in Tuberculosis work, remains the same as the previous year, viz. : one Medical Officer, two Clerks, four European Health Visitors four Indian and four Native Health Assistants.

All notified cases have been visited and their home-contacts referred to the Clinics for examination and often for re-examination at a later date.

The investigation of work-contacts has been prosecuted actively, often resulting in visits to the Clinic by large batches of fellow-employees. As might be expected, more cases are detected amongst home-contacts than amongst work-contacts.

During the year, 14,514 visits to patients were made by the Health Visiting staff.

To those who are acquainted with the Tuberculosis epidemiological work, it will not be difficult to realise the vast array of problems and difficulties associated with well over 2,000 notifications annually, which require the attentions of this Department, particularly when cases require to remain at home owing to a shortage of hospital accommodation. The present staff, particularly the 'field' staff, is not large enough to cope adequately with all aspects of the work, especially with the checking-up of 'old' cases and with repeat examinations of contacts. For this reason alone, it is highly desirable that some finality be reached regarding the decision as to which authority will assume responsibility for Tuberculosis control, so that staff requirements may be satisfactorily adjusted.

This Department has continued to notify the Union Health Department regarding all active cases—mostly Natives—who return to their homes outside Durban. Details with regard to medical and residential information are forwarded. That many of these Native patients leave hospital against medical advice constitutes a problem requiring early solution by rendering available family allowances for patients in hospital.

European members of the staff of the Tuberculosis Section belong to the Care Committee of the Natal Anti-Tuberculosis Association, which meets once or twice monthly for the purpose of dispensing financial relief to patients and their dependants. In this regard, further assistance is rendered by the City Council, through the Care Committee, in respect of City cases for whom no hospital beds are yet available. Applications from families for assistance continue to increase each year. Many of these applicants are eligible for Government Disability and Child Welfare grants. Hardship follows any considerable delay in the issue of these grants.

The Friends of the Sick Association, which is represented on the Care Committee, has steadily increased the scope of its very valuable work, both at the F.O.S.A. Settlement for non-communicable cases and Tuberculosis contacts and also in regard to the establishment of their own numerous Care Committees.

During the year, the following sums were expended in relief of Tuberculosis families, by the Natal Anti-Tuberculosis Association and the Friends of the Sick Association respectively :—

£5,862 and £1,947.

The Health Education Section of the City Health Department undertakes all this Section's publicity and educative work, which has proved very successful amongst large gatherings of non-Europeans. During the year, the Section gave 30 film shows, 3,654 health talks and lectures dealing with Tuberculosis.

4. V.D. STATISTICS :

	Congella N. / A.				Addington E. / C.				McCords N. / A.				All Races						
	City		Imported		City		Imported		City		Imported		City		Imported				
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F			
New Cases	6,590 (5,527)	2,205 (1,971)	2,274 (1,758)	1,198 (1,017)	574 (452)	224 (171)	870 (502)	28 (223)	457 (242)	278 (232)	37 (36)	39 (34)	7,621 (6,221)	2,707 (2,374)	1,265 (2,296)	10,802 (8,517)	3,972 (3,648)	14,774 (12,165)	
Ward Admissions... ...	1,409 (1,750)	1,042 (732)	1,230 (1,259)	1,157 (779)	148 (88)	— (—)	423 (148)	— (—)	420 (255)	287 (231)	96 (84)	99 (94)	1,977 (2,005)	1,329 (1,051)	1,749 (1,343)	1,256 (1,021)	3,726 (3,348)	2,585 (2,072)	6,311 (5,420)
Outpatient Attendances	30,301 (27,786)	13,307 (13,241)	10,531 (4,304)	6,448 (3,628)	4,698 (4,839)	4,497 (3,612)	2,083 (976)	879 (743)	2,715 (2,375)	2,239 (1,707)	177 (56)	133 (49)	37,714 (34,500)	20,043 (18,560)	12,791 (5,336)	7,460 (4,520)	50,505 (39,836)	27,503 (23,080)	78,008 (62,916)
Clinics held					548 (535)		299 (299)				52 (51)					—	—	899 (885)	

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4. (i) V.D. FOLLOW UP : The following table reflects the activities of the European Health Visitor and the Native and Indian Health Assistants in the following up of cases, defaulters, absconders and contacts.

	VISITS	CONTACTS LOCATED	DEFALUTERS LOCATED	ABSCONDERS LOCATED	CLINICS ATTENDED
European Health Visitor ...	1,917 (1,499)	19 (53)	711 (611)	37 (11)	143 (66)
Native Health Assistants ...	4,989 (4,438)	905 (799)	1,143 (1,486)	8 (16)	92 (1,284)
Indian Health Assistants ...	1,624 (1,087)	78 (145)	923 (528)	— (4)	58 (136)
TOTAL :	8,530 (7,024)	1,002 (97)	2,777 (2,625)	45 (31)	293 (1,486)

Native Administration Department. Of the 99,725 Natives examined during the year, the following V.D. diagnoses were made :—

Balanitis 743, Warts 62. Gumma 1.

Vaccinations carried out, 16,801 and 1,544 were found unfit for work.

V.D. STATISTICAL COMPARISON FOR THE YEARS 1943 TO 1947.

	Congella N. / A.				Addington E. / C.				All Races				Grand Total					
	City		Imp.		City		Imp.		City		Imp.		City		Imp.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
NEW CASES :																		
1943...	2,605	1,440	1,326	1,649	358	60	271	8	91	82	3,054	1,582	1,674	732	4,728	2,134		
1944...	4,625	2,056	2,138	1,280	220	174	490	9	143	139	124	5,015	2,369	2,754	1,403	7,769	3,772	
1945...	4,458	1,888	2,108	938	357	203	553	17	289	212	33	5,110	2,320	2,688	976	7,798	3,296	
1946...	5,527	1,971	1,758	1,017	452	171	502	223	242	232	36	6,221	2,374	2,296	1,274	8,517	3,648	
1947...	6,590	2,205	2,274	1,198	574	224	870	28	457	278	37	7,621	2,707	3,181	1,265	10,802	3,972	
WARD ADMISSIONS :																		
1943...	2,104	1,180	1,279	550	40	—	406	—	82	21	19	2,136	1,201	1,752	569	3,888	1,770	
1944...	1,954	759	811	988	10	—	111	—	75	28	56	2,039	1,008	978	2,039	3,017	1,895	
1945...	1,578	1,048	891	951	21	—	137	—	271	58	143	1,893	1,428	1,061	2,954	2,414	4,912	
1946...	1,750	732	1,259	779	88	—	148	—	255	231	84	94	2,005	1,051	1,343	1,021	3,348	5,638
1947...	1,409	1,042	1,230	1,157	148	—	423	—	420	287	96	99	1,977	1,329	1,749	1,256	3,726	5,420
CLINIC ATTENDANCES :																		
1943...	24,437	15,002	19,017	15,241	1,511	1,990	1,969	—	1,511	1,990	1,969	41,668	18,482	60,150	—	—	—	
1944...	30,684	19,017	5,673	3,349	1,796	1,796	1,796	—	3,349	1,796	1,796	38,153	24,156	62,309	—	—	—	
1945...	19,682	10,557	9,776	4,105	1,626	2,624	1,681	—	4,105	1,626	1,681	6,120	38,202	20,395	58,597	—	—	
1946...	27,786	13,214	4,304	3,628	3,612	2,375	1,707	—	4,304	3,612	2,375	4,520	39,836	23,080	62,916	—	—	
1947...	30,301	13,307	10,531	6,448	4,698	2,083	2,239	—	10,531	6,448	4,698	7,460	20,043	12,791	27,503	50,505	78,008	

VENEREAL DISEASE. ACCOMMODATION :

Europeans and Coloureds : Addington Hospital : In-patient treatment at Addington is available only for males despite the fact that accommodation for both sexes was provided some years ago in a special V.D. hospital block. Lack of staff is apparently the root-cause of this very serious defect in the V.D. control programme. Coloured females especially are prone to default after a short period of treatment and if the existing in-patient accommodation were put into commission, these patients could be intensively treated until they become non-infectious.

It is to be hoped that the Provincial Administration will remedy this outstanding defect in the course of improving and extending general hospital facilities in Durban shortly.

The evening clinics for workers, at Addington, have proved a boon, especially to the Coloureds, many of whom work in factories. The evening Clinic at Congella, which has been operative for several years, has an average attendance of 70 patients every Tuesday evening.

The staff of the V.D. Department at Addington and Congella has not been increased in number during the year. The Province Administers the European and Coloured Clinics at Addington, and the in-patient section of the non-European Clinic at Congella. The Municipality administers the out-patient section of the Congella Clinic and also employs :

- (a) a female European Health Visitor, who attends all the Clinics and rounds up defaulters and contacts ; and
- (b) Non-European Health Assistants who perform similar duties in respect of Non-Europeans.

Non-Europeans : Congella Hospital : (King Edward VIII Hospital and City Fever Hospital). Although the Provincial Administration has provided well equipped hospitals at Dundee, Port Shepstone, Vryheid, Eshowe, etc., numerous Non-European patients by-pass these institutions and come to Durban for treatment, thereby over-crowding both the V.D. Wards and outpatient Clinics. Unless this tendency is checked, it will shortly be necessary to consider building extensions to the Congella Clinic, as all the available space is now fully occupied.

During the year, the practice of sending out a blood-sampling team to various Coloured schools has been continued. Blood-samples are taken from all the children, returned to the Clinic, where the samples are tested. Positive reactors are brought to the Clinic for treatment.

Health 'Panel' Service. The number of employers sending their servants for examination and certification before engagement in domestic duties continues to increase, an average of 15 such cases being examined daily.

Factors Adversely affecting the V.D. Control Programme. The number of young Native girls under the age of 14 who acquire Syphilis through sexual intercourse continues to prove a depressing problem. Such cases are reported to the Social Welfare agency and to the Police. The culprits are seldom brought to justice owing to the difficulty of proof.

Indifference to Danger of Infection. Since the advent of the Sulpha Drugs and Penicillin, the treatment of cases of both Gonorrhoea and Syphilis has become so easy in early uncomplicated cases that a new problem is becoming evident. Africans especially, are losing their fear of V.D. and tend to cast whatever little discretion they ever had in this connection completely to the winds.

No inhibitions as regards their sexual instincts are powerful enough to induce them to avoid the dangers of promiscuity. This danger, already too manifest, is likely to increase still further. Every day we see patients in the non-European Clinics who are being treated for their second, third and fourth infections.

Such factors as these which tend to diminish the success of V.D. Control measures are true reflections of the appalling demoralisation which is likely to overtake the 'urbanised' native in the absence of proper housing and the full gamut of health, educational, recreational and general social amenities normally associated therewith.

Pre-requisites to the improvement of V.D. control :

1. For Europeans and Coloureds : Provision of staff and accommodation for in-patient treatment of females ;
2. For Natives : (a) extension of family housing ; (b) extension of clinic space ;
3. For all races : Extension of health education.

FIELD HYGIENE :

During the year under review the section was re-organised and strengthened. The new disposition permitted a more comprehensive control of the pest factors of the City.

The section continued to test all new anti-pest poisons, sprays, insecticides and disinfectants as they became available with a view to ascertaining their values as pest-destroyers.

Apart from D.D.T. preparations, there was nothing of outstanding merit. However, certain substances such as Benzine Hexachloride and Chlorodane, both still in short supply, give great promise particularly for the control of roaches. When procurable in quantity these substances will be fully tested.

Plague and Rodent Control. The staff allotted to these activities comprises 4 Europeans (1st Grade General Assistants) and 7 Indian Field Assistants. The functions of this staff are twofold :

- (a) systematic appraisal by means of gassing and trapping, of all industrial and commercial areas for plague--index purposes ; and
- (b) the reduction of the rodent population by baiting, trapping or gassing or by a combination of any of these measures. Indications for rodent-proofing are referred to the General Sanitation Section for attention.

Phosphorous and Barium Carbonate have been used almost exclusively in the preparation of poison-baits. In a few instances strychnine has been resorted to.

Used experimentally "Antu" (alphanaphthylthiourea) has shown good results but it has not been used for routine work. Briefly, its disadvantages are :

- (a) it is very toxic to dogs and cats ;
- (b) sub-lethal doses induce tolerance, i.e., the ability to withstand very heavy doses ;
- (c) several peculiarities not yet fully understood, and
- (d) high cost.

For trap work, vegetables, tomatoes, meat and fish have been used with good effect.

Statistical :

Total rodent-carcases recovered	3,592
Total poison-baits laid	136,815
Total traps set	10,441
Total premises trapped for 'plague-index'	803
Total rodents examined for B. pestis	712

Gassing of rodent harbourages involved the use of 853 lbs. of Cyanogas "A" Dust.

Mosquitoes. Eight Native Health Assistants specially trained in anti-mosquito work devote their full time to observation of all actual and potential anopheline breeding places. In the course of their duties they collected 4,198 specimens of larvae for identification in the Section office.

"A" Gambiae, a malaria vector, was located at one point only and promptly dealt with.

Anti-larval measures of ditching, oiling, draining and reclamation are promoted as a matter of routine. Details of work are as follows :

Drains cleared	626,928 yards
Anti-malaria oil used	10,346 gallons
Larvae examined in laboratory	4,198
Land cleared of undergrowth	54 acres

Roaches. In general the anti-roach programme is confined to treatment of sewage and stormwater systems and is prosecuted daily. At fixed intervals, various other Municipal undertakings, i.e., City Hall, Squatters Market, Indian Market, Native Market and Eating Houses are treated. Work on private premises is limited to manholes and other outside adjuncts to the drainage system.

The labour force consists of 12 Indians divided into 4 gangs of 3. These gangs are supervised by a European General Assistant and an Indian Sirdar.

For purpose of convenience, the drainage-reticulated part of the City is divided into four sections, one gang operating in each.

Except when engaged on periodic work at the various Municipal markets, etc., the gangs devote the whole of their time to spraying every manhole, water-valve box and gutter-bridge in their respective areas. Manholes over electric and telephone cables are left untouched.

On an average, each gang completes a circuit of its zone in 5 weeks. Approximately 29,000 points are treated each month and the spray used averages 500 gallons.

The material used is a spray with a Carbolic Acid content and is rapidly effective, giving a 100% kill on contact.

Details of anti-roach work are as follows :—

Sewer manholes sprayed	119,765
Stormwater manholes sprayed	84,639
Gutter bridges sprayed	46,352
Water valve covers, etc., sprayed	45,236
Drainage manholes on private property sprayed	52,295
 Total points treated	 <u>348,287</u>

Amount of spray used : 5,765 gallons.

Experiments on roaches with D.D.T. have not shown much promise. Good results under ideal conditions in test-cages are not repeated when experiments are conducted under normal conditions. The German roach population is reduced but slightly and its elimination is not accomplished. The American roach appears more susceptible to D.D.T.

Chorodane and Benzine Hexachloride, both reputed to have great lethal effects on roaches, are still not easily obtainable. When the supply of these substances is possible comprehensive experiments will be introduced.

Operations with Cyanogas "A" Dust in selected sections of the Sewerage system have succeeded in completely eliminating cockroaches harbouring therein at the time of application.

Cimex. The Department undertakes all anti-cimex measures necessary in Municipal premises and during the year was responsible for 230 H.C.N. fumigations and 29 treatments with D.D.T.

Experience proved the outstanding merits of D.D.T. as a destroyer of bugs.

The residual effect of D.D.T. more than compensates for its delayed action.

Private fumigating concerns used Hydrogen Cyanide on 3,247 occasions. Most of these fumigations were for cimex and a few for vermin not of public health significance, i.e., bookworms, borers and the like.

Statistical Summary :

Rodents :

Premises trapped for plague-index	803
Baits laid	736,815
Traps set	10,441
Cyanogas used : lbs.	853
Rodent carcasses recovered	3,592
Rodents examined for B. pestis	712

Mosquitoes :

Larvicide used : gals.	10,346
Ditches cleared : yards	626,829
Land cleared : acres	54
Larvae identified in section office	4,198

Roaches :

Sewer manholes sprayed	119,765
Stormwater manholes sprayed	84,639
Gutter bridges sprayed	46,352
Water valve covers, etc., sprayed	45,236
Private properties sprayed	52,295
Spray used : gals.	5,765

Cimex :

Premises fumigated by City Health Department	...	...	...	...	...	230
Premises fumigated by private enterprise	...	...	...	...	...	3,247

Vehicles : Mileage :

Anti-plague van	...	...	...	...	...	7,831
Anti-malarial truck	...	...	...	...	...	9,604
General	...	...	...	...	...	27,344

Health Assistants :

Visits	...	...	...	...	...	23,433
Complaints investigated	...	Rodents	...	...	...	297
		Mosquitoes	...	...	...	217
		Roaches	...	...	...	18
		Fleas and Ticks	...	...	...	61
		Cimex	...	...	...	2
		Flies	...	...	...	14
Premises corrected	...	Rodents	...	...	...	262
		Mosquitoes	...	...	...	254
		Roaches	...	...	...	40
		Fleas and Ticks	...	...	...	24
		Cimex	...	...	...	1
		Flies	...	...	...	38

Native Health Assistants :

Visits to Corporation premises	...	...	...	...	...	6,926
Visits to Non-European premises	...	...	...	...	...	10,313
Control advices given	...	...	...	...	...	1,592
Control advices complied with	...	...	...	...	...	1,119
Tubes of larvae for identification	...	...	...	...	...	1,094

EPIDEMIOLOGY :

Apart from the occurrence of Typhoid in a local orphanage, during February, the City has been singularly free from epidemic visitations. Partly, at least, this fortunate state of affairs must be ascribed to the high level of immunity among the townspeople following the immunisation and health education measures initiated by the Department two years ago. It may also be assumed that a high degree of residual immunity has persisted in the age groups at special risk following the 1944/45 epidemic of acute poliomyelitis.

Smallpox. Only one case was notified during the year, the patient being a male adult from the Greenwood Park area. Infection was mild and the patient recovered.

Within recent years much attention has been devoted to the subject of laboratory aids to the diagnosis of smallpox. One of the tests investigated, the Complement-fixation test using fluid from the vesicles and pustules has been stated to be of special value in differential diagnosis owing to the rapidity with which the result can be obtained. In Britain, test facilities have been established in the regional public Health laboratories and it is suggested that the British practice might be explored with a view to ascertaining whether a similar service could be introduced at some centrally-situated laboratory such as the Institute for Medical Research, Johannesburg. If feasible, such a service might well prove a boon to public health authorities in South Africa when dealing with obscure cases of modified smallpox requiring differentiation from such conditions as drug rashes, syphilis, the 'Stevens-Johnson syndrome' and Kaposi's baricilliform eruption.

In Britain, hitherto, vaccination has been looked upon as the chief means of protection against smallpox but in 1946 vaccination was placed on a voluntary basis and more reliance placed in the control measures of isolation, detection of contacts and disinfection. In Durban, as in South Africa generally, the population-pattern is so vastly different in constitution that mass vaccination must still be regarded as a mainstay against smallpox.

The highest priority is given to the subject of vaccination in both health education and immunisation programmes and it is pleasing to record that the response and co-operation from all sections of the Non-European community has been uniformly good.

Typhus. During the year, ten cases of the non-epidemic or murine type were notified as against eight in the previous year. The cases occurred irregularly throughout the year with a racial distribution as follows :—

European 7 ; Indian 2 ; Bantu 1.

During March, two Railway employees were affected presumably at their work, whilst in May a further case occurred in a European male working in a grain store at the Point. In several of the cases the diagnosis was confirmed serologically.

No cases of epidemic typhus occurred. Here it may be noted that only limited cleansing and de-lousing facilities are available at the Municipal Disinfecting Station and that, as yet, no decision has been reached by the Government as to the part-refund of the cost of erecting new premises.

Owing to the high incidence of scabies and pediculosis amongst Durban children, the Natal Education Authorities have repeatedly stressed the need for providing adequate public cleansing facilities in this area.

NOTIFIABLE DISEASES :

Typhoid Fever. Excluding 32 Coloured cases from St. Theresa's Home, 198 cases were notified as against 192 in the previous year, the racial distribution being European 14, Coloured 9, Natives 108 and Asiatics 67.

59 of the Native cases were domiciled in the Mayville/Cato Manor districts, in other words, more than half of the infection occurred in one area notorious for its defective sanitary environment.

A survey carried out in one of the worst foci at Cato Manor disclosed that almost all the residents were in regular employment in the Old Borough and that quite a number, both male and female, were either actual or potential food-handlers. Bearing this in mind with the fact that Cato Manor is also a favourite week-end resort for many of the Natives resident in the Old Borough, the influence of this area on the Enteric incidence in Durban generally must be considerable.

It may be confidently predicted that if the shack settlement at Cato Manor were cleaned up, the incidence of Enteric in the City would drop almost by half.

The almost total freedom from Typhoid of the inhabitants of Chesterville Native Village and the Cato Manor Economic and Sub-Economic Indian Housing, which are contiguous to the shack settlement, is convincing testimony to the efficacy of correct sanitary practice in eliminating this disease.

A much higher incidence at Cato Manor has doubtless been prevented by the installation of water-lines and stand-pipes a few years ago at the instance of this Department. Preventive standards, inadequate sanitation, congestion and over-crowding sustain the Typhoid potential and constitute an ever-present threat to the health of the inhabitants and indirectly to the European community which they serve as domestic servants and food-handlers.

Regular visits are paid by the Mobile Immunisation Unit to Cato Manor and other areas and anti-typhoid inoculation encouraged and practised as far as possible. In this work, the Unit is assisted by the Health Education Section which, in addition to routine preventive talks and film shows, advises the residents in advance of the visits of the Immunisation Unit and 'conditions' the various audience by means of appropriate propaganda.

Improved housing, water supply and sanitation are necessary if the environment sources of Typhoid infection are to be controlled. These measures together with health education and public health control of food-handlers, constitute the chief lines of defence against the disease, apart from pasteurisation as a preventive of milk-borne Typhoid.

During October, investigations were carried out at the Durban Corporation property contiguous to the Umlaas Waterworks situated about 18 miles from the City. Following the admission of a Typhoid case to hospital, information was received of other cases in the same house and, at the instigation of this Department, six more patients were moved to hospital. On the 3rd November, three further cases were admitted to hospital, from a dwelling situated within 100 yards of the house where the previous cases had resided. During the remainder of the month, 3 further cases were admitted, making a total of 13.

The cases were all confined to families of Indian lease-holders on the property : none of the Waterworks' employees were affected. All were inoculated against the disease.

During the year, six cases of Typhoid occurred through cross-infection in the local non-European hospitals.

In many instances, investigations could not be initiated owing to the moribund state of patients on admission, or to the vagueness or incorrectness of the addresses furnished. It is particularly in such cases that the work of the non-European Health Assistants has been so valuable in 'pin-pointing' the domicile of patients and in tracing contacts.

Typhoid Fever Outbreak : St. Theresa's Home. During the month of February, a sharp outbreak of Typhoid fever occurred at St. Theresa's Home, Sydenham, which is an orphanage accommodating about 150 male Coloured children. The cases were entirely restricted to the boarders. None of the adults on the staff of the institution were affected although their meals were served from the same kitchen as the pupils. The boarders attended a school adjoining the Home but none of the hundreds of day pupils nor their teachers contracted the disease.

The first patient took ill on 11th February, 1947. Subsequently, 20 inmates of the Home sickened between the period 16th to 21st February, both days inclusive. 8 of these patients were admitted to local hospitals whilst the remainder were isolated and kept under observation at the Home.

On 21st February, it was discovered that a high percentage of the boarders, although not complaining of feeling unwell, showed a slight to moderate degree of temperature. Owing to the large number involved, and the limited accommodation at Addington Hospital, arrangements were made to admit all febrile boarders to the Infectious Diseases Hospital for observation. On 22nd and 23rd February, 77 such cases were admitted and the hospital resources were taxed to the utmost, particularly as regards staff. However, through the courtesy and co-operation of the authorities at McCord's Zulu Mission Hospital, 4 Bantu sisters were seconded to the staff of the hospital ; it then became possible to make suitable staff arrangements.

From 25th February onwards, unproven cases were gradually discharged from hospital and ultimately it became possible to assess the magnitude of the outbreak which amounted to 32 cases. Generally speaking, the disease was mild in character and all patients recovered.

Exhaustive investigations were carried out into the source of the outbreak but, although certain important factors emerged, the exact channel and mode of infection were not established beyond doubt. The possibility of milk-borne infection was excluded at an early stage. A Native scullery maid, who had relinquished her services with the institution on the 31st January, gave a positive reaction to the vi-test. She was, however, eliminated owing to the non-appearance of Typhoid Fever amongst the adults and to the fact that the majority of cases had arrived at the Home after her departure. All the boarders were subjected to the vi-test but in no instance was a positive result obtained.

It was clear that the incident which led to the outbreak took place within a few days after the boarders had assembled for the new term. It was, however, difficult to obtain an accurate history as to how these inmates had spent their leisure hours and to trace a factor common to all the patients. It would seem that the most likely source of infection was a small stream running past the back of the Home about 250 yards distant.

It was discovered that at week-ends an effluent overflowed from a sewage storage tank which served a Coloured housing scheme in the neighbourhood of the Home and polluted this stream. Apparently, a decision had been taken to discontinue the vacuum tank service over the week-ends thus saving payment of overtime wages to the staff engaged on the work. Add to this fact the history that the water in the stream had been used by some of the boys to prepare a concoction dubbed 'a wild fruit drink' and a reasonable explanation of the outbreak becomes possible.

Typhoid District Incidence per 1,000 of the Population.

DISTRICT	No. of Cases	Incidence per 1,000 of the Population
Old Borough	46	.24
Greenwood Park	6	.22
Sydenham	21	.57
Mayville	69	1.12
Umhlatuzana	9	.51
South Coast Junction	47	1.22

Amoebic Dysentery. Local cases amounted to 2,455 as against 2,551 for 1946, 67% of these being Natives. As the infection derives from environmental sources and additionally is spread mainly by food-handlers, the Council has declined responsibility for costs of hospitalising acute cases, which as a category are non-infective.

In last year's Annual Report the question of out-patient treatment of amoebic cases was discussed together with the need for the organisation of "Out-patient" and "Ambulant sick" Clinics run in general hospitals.

The ambulant treatment suggested was based mainly on the employment of Diodoquin but the high hopes entertained for this Amoebicide have not fulfilled expectations, at any rate in Natal. It is now clear that further research is required before definite recommendations can be forwarded on this aspect of control.

Following on the work of Dr. B. F. Sampson, Consulting Pathologist, in 1944, an interesting paper dealing with some aspects of Amoebiasis in Africans was published during the year by Dr. R. Elsdon-Dew of the staff of the King Edward VIII Hospital, Durban. The paper records certain impressions gained in the laboratory of the hospital during the year 1944-1945 and some of the conclusions reached are worthy of note in that they refer to conditions prevailing in and around Durban. Both the papers by Sampson and Elsdon-Dew are valuable contributions to the subject of local Amoebiasis and for this reason certain points from these authorities are recorded herewith :—

Sampson points out, for many years there was a strong conviction amongst members of the Durban public that the dissemination of the disease in the town was attributable to fresh vegetables grown by Indian market-gardeners under conditions of insanitation. However, as the result of an exhaustive survey covering five months, Sampson demonstrated that the incidence amongst the different racial groups was as follows :—

Europeans 5% ; Indians 3% ; Natives 17%.

These figures naturally served to explode the generally accepted view regarding the origin of the disease in Durban and also exposed the fundamental role played by the Native section of the population in this regard. As only two specimens were examined from each individual in the above survey the above figures must be taken as minimal only—the true percentages are probably very much higher. Sampson's highest incidence namely 26%, was found in a Native school at Umzumbi on the South Coast, about 70 miles from Durban.

As regards the incidence and death rate from acute Amoebic Dysentery in the Native, Sampson showed that this had already reached serious proportions and Elsdon-Dew confirms this observation in these words :—

"Amoebiasis in the African in Durban is a very grave problem. Not only is there a high degree of infestation but, in the African, the disease manifests itself in a fulminant, rapidly fatal form The clinical condition of the patient is correspondingly bad, the majority being prostrate on admission. Deaths are rapid and frequent, a large portion following perforation. The mortality is 10·8 per cent."

Continuing, Elsdon-Dew draws this conclusion :—

"The disease is one of poor people, by far the great majority of cases being labourers or out-of-works. The better-paid, better-fed domestic servants constitute a very small minority. The greatest incidence is to be found in the area known as Mayville or Cato Manor, where Indians and Africans are living cheek by jowl in shacks and the like, without adequate water supplies or sewerage disposal. Other areas of the town such as Lamont Village, a purely Native township, though dependent on communal taps for water and without water-borne sewage, are singularly free from the condition.

"Per contra, there are areas with all services which have a fairly high incidence—usually among the labouring class living in barracks. This coupled with the fact that Indians at Mayville do not seem to be as susceptible to the disease though their environments are similar, suggests that though hygiene is all-important, it is not the whole story, but that some factor such as diet may play in the genesis of the acute fulminating condition as seen in the African."

Now, in strong contrast to the gloomy picture painted above, it emerges that the fulminating type of disease amongst Europeans and Indians is negligible and that, as a matter of fact, the death rate from the disease, in any form, amongst these two racial groups is also very low.

Discussing the importance of diet, Sampson points out that in Durban the Native is in an entirely different category to the European and the Indian, as his diet is particularly deficient in protein and fat and the great bulk of his food consists of maize in some shape or form.

Sampson, also refers to the possibility that Shimiyana and other illicit brew, lower the resistance of the bowel and that drinking may be an indirect factor in the spread of the disease.

But whatever the various factors are, two must always be taken into account because they are of prime importance, namely infected hands and uncooked food.

In the certain knowledge that a large proportion of the Durban Natives are carriers of the disease, Sampson rightly stresses the danger from the consumption of such articles as milk, bread, confectionery, ice-cream and any uncooked food prepared in the kitchen such as salads and sandwiches.

Elsdon-Dew points out the disease has a seasonal incidence following both rainfall and high temperature. He concludes his article by saying "Primarily and fundamentally, Amoebiasis is a filth disease spread by the imperfect disposal of faeces. He who harbours an Amoeba has all unwillingly indulged in Coprothagy."

Diphtheria. The increase of 336 cases reflects an increase of 41 over the previous year : many of these were 'carriers' hospitalised for treatment. A high proportion of adults as compared with children reflects the value of specific immunisation which continues to receive public support particularly from the European section of the community. The steady decline in European cases is reflected in the table below :—

Diphtheria Incidence 1940/1947.

YEAR	European	Coloured	Native	Asiatic	TOTAL
1940	194	21	16	23	254
1941	228	18	42	8	296
1942	262	26	63	14	365
1943	295	24	44	15	378
1944	416	74	73	36	599
1945	255	36	116	37	444
1946	165	18	74	41	298
1947	156	24	110	46	336

Acute Poliomyelitis. A total of 5 cases were notified during the year as against 14 the previous year and 188 during the year of the epidemic (1944/45). In one instance, "case contact" was established as the source of infection, the patient being a probationer nurse who had attended a case in hospital. No means of immunisation has, as yet, been devised to combat the disease.

Cerebro-Spinal Meningitis. The incidence of Cerebro-Spinal Meningitis was slightly greater than in the previous year. 18 cases being notified as against 12.

Scarlet Fever. This infection dropped by 25% as compared with the previous year, the figures returned being 86 as against 107.

Other Infectious Diseases. The incidence of other infectious diseases has been low and calls for no special comment.

OTHER DISEASES—FOOD POISONING :

During the month of December, 1946, cases of food poisoning occurred among Natives living in Umlazi Mission reserve and Indians at Isipingo Rail, which at first baffled diagnosis. The illness, as a rule, commenced with vomiting and headache, pains in the limbs and joints, swelling of the face and puffiness of the eyelids. In many cases, a rash subsequently developed. Following the acute stage, patients complained of pains in the legs and feet with difficulty in walking. Several deaths were notified amongst the Natives in the Reserve.

On 10th January, 1947, St. Aidan's Hospital, Durban, reported the admission of an Indian male adult and his son from Isipingo Rail, who were suffering from Polyneuritis and who gave a history similar to that previously obtained from Natives in the Umlazi Mission Reserve.

Medical officers of this Department, who in 1938, had investigated a local outbreak of paralysis caused by the contamination of cooking-oil with tri-ortho cresol phosphate, examined the patients at the request of the Union Health Department. Both patients exhibited signs of severe Polyneuritis with loss of power in hands and feet. It was considered that poisoning by either lead or ortho-cresol phosphates was highly improbable.

The history of the patients was interesting. They stated that on or about the 15th December, 1946, all members of the family had suddenly contracted an illness accompanied by vomiting, swelling of the face and sore throat, followed by a cough and later by a rash affecting the face and upper limbs. The rash subsided and was followed by weakness in the limbs. The information was vouchsafed that several families at Isipingo Rail were similarly affected.

On the following day (11th January), Medical Officers from both Departments carried out a rapid survey at Isipingo Rail which was continued on the 12th and extended to include the Umlazi Mission Reserve. Many cases of Polyneuritis were discovered, several of which were gradually recovering from weakness of the lower limbs. It was observed that the incidence was familiar in character and that all members in each unit had been simultaneously attacked.

Furthermore, it was noted that breast-fed babies had escaped and that in all instances the illness had developed between 12th and 22nd December. It also soon emerged that a factor common to all families was the purchase of grocery items from one Indian storekeeper in the neighbourhood. It now seemed certain that the illness was not of an infectious nature.

Whilst the above investigations were proceeding, further cases were discovered in local non-European hospitals.

On the 13th January, an important clue was obtained from a Native woman living in the Umlazi Mission Reserve, all the members of whose family had been affected in varying degrees. On being interrogated, she stated that she suspected some coarse salt purchased a few weeks previously and which had a faint pinkish discolouration as the cause of their illness.

She had purchased the salt in question from the storekeeper but after her suspicions had been aroused, this item was bought elsewhere. Despite the fact that a fortnight to three weeks had elapsed since its purchase, a sample was still available in which arsenic was subsequently detected to the extent of ten thousand parts per million.

On 14th January, a conference of Medical Officers was held at the Government Laboratory, Durban, when it was agreed that the illness was almost certainly not infectious but of the nature of a metallic poisoning such as produced by arsenic. Though the text-books make little mention of the fact some observers present stressed the signs of swelling of the face and joints which they had observed in previous outbreaks of arsenical poisoning. Confirmatory evidence of the cause of the outbreak was soon forthcoming from the positive results obtained in the analyses of biological specimens taken from patients. The stage had now been reached when the outbreak could definitely be attributed to poisoning by arsenic with coarse salt as the vehicle.

Subsequent investigation revealed :—

- (a) that the salt had been purchased from an Indian wholesale firm in Durban ;
- (b) that contamination in Durban during storage was highly improbable and could be excluded ;
- (c) that, in all probability, the contaminated bags formed part of a consignment comprising 110 bags from certain salt-works up country which were delivered in Durban on the 13th September, 1946. It was this consignment which was sold to retailers practically throughout the month of October ;
- (d) that the number of contaminated bags was at least three ;
- (e) that there was no evidence to show that contamination could have taken place at the salt-works ;
- (f) that, by inference, somewhere in transit the bags were most probably contaminated between the salt-works and the Durban wholesalers ; and
- (g) that the contaminating agent was almost beyond doubt a red-coloured cattle-dip.

Up to the 16th January, 1947, no City cases had been reported but on that date the Department was notified of a case in the King Edward VIII Hospital. The story related by this patient initiated a chain of investigations which led to the discovery of several families in the Mayville district who had been affected as far back as the first half of the month of November, that is to say, a month or so earlier than the outbreak which originated at Isipingo Rail. It was indeed most unfortunate that the sufferer had not sought medical assistance earlier, for had this been done, timeous investigations must have resulted which might well have prevented the larger outbreak in the Southern area.

The first cases in the City occurred on the 8th November, 1946, when eleven persons in one family contracted an illness accompanied by vomiting, abdominal pains and acute prostration shortly after they had consumed their evening meal. Within a few days one member died. Nevertheless, it was not until the middle of January that another member, owing to his paralysed state, sought hospital treatment and came to the notice of the Department. Owing to the severity of her symptoms, his wife was soon afterwards admitted. The remaining members of the family had either recovered or were making good progress though still complaining of paraesthesia of the hands and feet and of some difficulty in locomotion.

On the 9th November, 1946, another Indian family resident in the same area were stricken and in this instance both parents and three out of four children were affected. Within a few days, two adult Natives living at the same

address took ill though their two children remained well. A week afterwards in the same neighbourhood, another Indian family consisting of six members, mostly adults, contracted a sudden illness accompanied by vomiting and diarrhoea followed by swelling of the face, skin pigmentation, desquamation and loss of power in the limbs.

Between the 12th and 18th December, 1946, the three members of another Indian family living opposite the Natives already mentioned took ill within a few days of each other with similar symptoms.

After this investigation had concluded, further cases in the Mayville district were traced by means of a Coloured patient who had been treated in hospital for some weeks for a condition diagnosed as alcoholic neuritis. Arsenic was subsequently detected in specimens of his hair. His wife had been only mildly affected and had recovered. She related how two of her neighbours had also suffered slightly and had fully recovered.

Five of the six families, attended to above, gave a history of having bought coarse salt from one common source—an Indian storekeeper who traded in the area—and in three instances, the onset of their illness coincided with the date of purchase. In the case of the Native family the probability of having borrowed salt from the Indian neighbours was not denied but it was alleged that their salt had been purchased at the Indian Market and that the storekeeper had not supplied this commodity for some weeks prior to their illness. However, little reliance could be placed on this statement as it was obvious throughout the investigations that those interrogated were anxious not to antagonise members of a class on whom they depended for the necessities of life.

The history that, in one family, cases occurred in December is attributed to the fact that the housewife had stored her supply of salt from the dealer for some weeks until a ration drawn by her husband had become exhausted.

The connection between the Durban and South Coast outbreaks was established when it became known that the Mayville storekeeper had obtained his deliveries from the same wholesaler concerned with the Isipingo outbreak and the relationship became even closer when it transpired that two deliveries had been effected during October and on the 5th and 16th of that month respectively. Here it is interesting to observe that the Union Health Authorities seized an unopened contaminated bag at Umgzinto which had been railed by the Wholesale firm on the 5th October, and that the bag which was responsible for the outbreak at Isipingo Beach was received therat on the 18th October, 1946.

Briefly then it may be said that at least 30 non-Europeans in the Mayville district suffered from arsenical poisoning during the months of November and December, 1946. As part of a more generalised outbreak, the main brunt was borne by Indians and Natives resident at Isipingo Rail and in the Umlazi Mission Reserve. No Europeans were affected. The outbreak (approximately 250 cases) has probably not been surpassed in the history of the country as far as arsenical poisoning of humans is concerned. Both extensive and intensive searches were carried out by the Inspectorate staff among stocks of salt held by numerous retailers throughout the City and the hundreds of bags held by the wholesalers were also carefully inspected and analysed before being released over a period of several weeks.

In conclusion, it should be noted that two matters remain unsolved. The first relates to a sudden and severe illness which overtook three Natives living in a shack in Westville a few hundred yards beyond the City boundaries at the end of September, 1946. Several weeks later two were hospitalised and the cause of their disabilities established as due to arsenical poisoning. Salt had been purchased from at least two storekeepers in the Cato Manor district but no connection with the wholesale firm concerned in the later cases was established. These patients probably suffered as a result of using, for cooking purposes, some utensil which had contained arsenic. Several instances of such a mishap have been recorded, one quite recently, from Pietermaritzburg.

The other refers to the arsenical poisoning of an Indian family resident in the Clairwood area to which the attention of the Department was drawn by the admission of a male adult patient suffering from paresis of the limbs to the King Edward VIII Hospital in the earlier part of March, 1947. Investigations disclosed that the remaining members of the family, consisting of patient's wife and two young children, had also been affected but to a lesser degree. Their history was indefinite but pointed to the onset of the illness, at any rate in the husband's case, as sometime at the beginning of February. Salt taken from an almost empty receptacle showed an excessive content of arsenic (i.e., 1,500 parts per million). No further cases were traced nor were any subsequently reported from this focus. The mystery was further deepened by the fact that no connection was ever established between this family and those affected in the Mayville and Isipingo Districts. Although the local storekeeper obtained his stocks of salt from the same firm of wholesalers involved in the general outbreak, he had long since sold any bags which may have been open to suspicion. The storekeeper refuted any allegation against his salt by saying he had supplied his own family consisting, as he said, of some thirty persons, from his own stocks without untoward results nor had he received any complaints from his customers in regard to this salt. Suffice it to say that the prompt action of the Department in seizing the remaining portions of salt used by this family unquestionably saved the three members remaining at home from serious consequences and further deterioration in their physical condition. But how the contaminated salt found its way to this home must needs remain a matter of conjecture.

EPIDEMIOLOGY : FORMIDABLE EPIDEMIC DISEASES :

Vaccinations (By courtesy of the Deputy Chief Health Officer). The following vaccination of infants and 12 year old children were carried out during the year :—

Infants :	
Successfully vaccinated	1,068
Insusceptible to Vaccination	96
Postponed owing to Illness	8
Previously had Smallpox	1
12-year olds and others :	
Successfully vaccinated	20
Infants :	
Exemption certificates granted	43
Exemption certificates refused	Nil
Indian Immigration Vaccination :	
Successfully vaccinated	415
Insusceptible to Vaccination	3
Postponed owing to Illness	5
12-year olds and Over :	
Successfully Vaccinated	Nil
Summary of Vaccinations for the City during the Year :	
Carried out by the District Surgeon	1,602
Carried out by the Municipal Native Affairs Department	16,801
Carried out by the City Health Department	16,415
	<u>34,818</u>

Immunisation. This free service continued to be popular with all races. Every effort is made to ensure that immunisation courses were completed. By arrangement with the Education Authority, schools were visited by a mobile unit. Similarly at the request of industrialists, many factories were visited and employees dealt with.

The routine programme of collecting serum for the Vi-testing of food-handlers, i.e., dairy personnel, employees in milk-bars, tea-rooms and prospective food-handlers convalescent from Typhoid fever, was rigorously maintained.

The following reflects the activities of the section for all classes of immunisation since its inception.

	EUROPEAN	COLOURED	NATIVE	ASIATIC	TOTAL
1944	3,276	270	2,363	871	6,780
1945	4,929	959	3,732	1,285	10,905
1946	4,190	1,020	4,464	7,194	16,858
1947	4,107	1,733	6,718	5,644	18,202

Individual immunisations for the year were as under :—

	EUROPEAN	COLOURED	NATIVE	ASIATIC	TOTAL
Diphtheria :					
Partial	3,295 (4,244)	1,369 (1,140)	4,969 (1,612)	3,590 (7,954)	13,223 (14,950)
Complete	3,014 (3,391)	1,030 (882)	2,681 (917)	4,573 (6,026)	11,298 (11,216)
Whooping Cough :					
Partial	2,123 (1,025)	187 (140)	13 (79)	13 (53)	2,336 (1,297)
Complete	984 (394)	45 (61)	5 (25)	3 (18)	1,037 (498)
Enteric :					
Partial	111 (146)	916 (35)	5,054 (1,002)	1,604 (149)	7,685 (1,332)
Complete	109 (405)	658 (131)	4,032 (3,522)	1,068 (1,140)	5,867 (5,198)
Vi-tests	65 (103)	170 (—)	1,469 (1,755)	197 (169)	1,901 (2,027)
Swabs taken	324 (275)	36 (50)	49 (23)	64 (52)	473 (400)
Vaccinations	2,213 (1,992)	303 (147)	11,512 (13,846)	2,387 (389)	16,415 (16,374)

The effect of immunisation on large communities is amply illustrated by the comparative schedule of the notification rate per 1,000 of the population for Enteric and Diphtheria as set out below :—

	1942	1943	1944	1945	1946	1947
Enteric :						
European	1.17	.64	.34	.15	.14	.11
Coloured...	1.42	1.17	.34	.58	.68	1.98
Native	2.28	2.13	1.49	.86	1.04	.99
Asiatic ... ... ...	.24	.75	.47	.28	.34	.57
Diphtheria :						
European	2.48	2.77	3.84	2.33	1.23	1.23
Coloured...	3.07	2.81	8.44	4.01	1.66	2.26
Native ... ... ...	.85	.60	1.01	1.61	.59	1.00
Asiatic ... ... ...	.15	.16	.37	.37	.33	.39

HEALTH EDUCATION :

The highlight of the year was a "Defeat Diphtheria" week synchronising with the Medical Congress which was held in Durban during October. Publicity included original slogans which were printed on 'dodgers,' leaflets and on banners. Slides were designed and displayed by local cinemas. Dodgers were distributed to the travelling public. Radio was also employed. Large crowds of Europeans, Coloureds, Natives and Asiatics gathered at clinics and advertised venues. The original key-slogan "Be wise and Immunise" has since been used by the Johannesburg Broadcaster in a health talk on Diphtheria.

Special badges were designed for award on completion of successful immunisation. The European Badge is called "Imadi," i.e., Im—immunisation, a—against, di—diphtheria. The Bantu badge uses a symbol of their own folk-lore of "protection." For the Asiatic the insignia is "D.D.D." (Defeat Deadly Diphtheria).

Schools. The new Disney Health Cartoon Films were first shown to Coloured, Indian and Bantu schools. Halls were borrowed where schools had no suitable accommodation. At one venue, 2,000 Indian children thronged a large Non-European theatre loaned for the occasion.

Compounds. The Loudspeaker Van visited Native compounds every lunch hour : talks were given on V.D., T.B., Food-handler Hygiene, Nutrition, and Infectious Diseases. Films are also shown at Compounds, shows being given in the open-air when no halls are available.

Bantu Press. A series of illustrated articles have appeared in the newspaper "ilanga lase Natal" under captions "Health Lesson No. 1" etc.

Literature. New Zulu pamphlets have been written including "Immunisation and Injections" in which distinction is drawn between injections which protect the healthy from attack by disease and those which merely cure. The Bantu have been confused over the ambiguous subject of "injections."

Open-Air Instruction. With the aid of a new generating plant Health Films have been shown where formerly it was impossible owing to lack of current. 1,200 Bantu attended the first show of this type.

Native Administration Department. Health talks were given daily at the Registration Offices to seekers of employment.

Domestic Servants. A new feature has been routine talks to domestic servants congregated in parks, beaches, public gardens; housewives were invited through a striking advertisement in the Press to telephone when they wanted their servants instructed. The loudspeaker van then proceeded to the address, encircled the block calling all neighbouring servants and a talk was given on whatever subject the housewife was concerned about.

The general expansion of the work can best be judged by comparing the statistical reports of 1945/46 with the current year's statistics.

(a) Health Education : Attendances at Health Talks and Bioscopes :

DISTRICT	EUROPEAN	COLOURED	NATIVE	ASIATIC	TOTAL
Old Borough	669 (810)	1,464 (925)	160,125 (136,684)	31,454 (1,216)	193,712 (139,635)
Greenwood Park ...	49 (58)	— (55)	10,415 (14,494)	8,670 (1,434)	19,134 (16,041)
Sydenham	164 (—)	107 (40)	11,905 (7,664)	9,375 (3,048)	21,551 (10,752)
Mayville	1 (—)	450 (50)	36,616 (26,133)	7,941 (2,540)	45,008 (28,723)
Umhlatuzana	34 (36)	— (20)	12,621 (20,190)	6,792 (895)	18,447 (21,141)
South Coast Junction ...	131 (60)	200 (180)	30,553 (20,965)	24,272 (3,354)	55,156 (24,559)
TOTALS :	1,048 (964)	2,221 (1,270)	262,235 (226,130)	88,504 (12,487)	354,008 (240,851)

(b) NUMBER OF TALKS GIVEN.

		Venerel Diseases		Tuberculosis		Infectious Diseases		Immunisa-tion		Food-Handlers		Pest Control		Nutri-tion		Personal Hygiene		Isishim-uyana		Safety First		Diphtheria		Dom. Ser-vants		Worms of Crip-ples		Care of Crip-ples		Total	
		Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films	Talks	Films		
Old Borough	...	4,150 (1,345)	4 (18)	4,072 (1,130)	18 (16)	3,400 (1,515)	3 (21)	2,988 (1,539)	3 (16)	3,639 (1,483)	7 (69)	133 (44)	24 (20)	26 (24)	3 (2)	52 (29)	20 (25)	53 (11)	82 (-)	1 (-)	89 (74)	19 (3)	9 (29)	18,703 (7,310)	101 (147)	13 (4)					
Greenwood Park	...	11 (38)	— (-)	20 (24)	3 (-)	88 (51)	1 (-)	93 (69)	— (-)	49 (44)	2 (-)	17 (20)	2 (2)	14 (24)	2 (23)	13 (-)	2 (-)	21 (-)	2 (27)	— (4)	— (-)	1 (-)	1 (15)	1 (-)	1 (2)	350 (324)	13 (4)				
Sydenham	...	9 (19)	1 (-)	10 (9)	6 (-)	18 (35)	5 (-)	66 (35)	3 (-)	18 (30)	— (-)	36 (19)	7 (-)	3 (1)	5 (19)	8 (1)	4 (19)	— (-)	27 (-)	5 (-)	— (-)	1 (-)	1 (15)	5 (-)	232 (201)	41 (1)					
Mayville	...	9 (28)	1 (2)	6 (26)	2 (1)	138 (35)	2 (3)	195 (35)	— (3)	61 (25)	1 (-)	56 (16)	2 (1)	48 (45)	— (1)	13 (1)	1 (1)	9 (4)	— (-)	84 (-)	— (-)	13 (-)	1 (1)	2 (13)	2 (-)	632 (229)	11 (11)				
Umhlatuzana	...	22 (37)	1 (3)	9 (21)	1 (2)	50 (53)	— (2)	60 (53)	— (2)	23 (35)	— (-)	41 (6)	— (1)	18 (24)	— (1)	1 (1)	— (-)	1 (6)	— (-)	27 (-)	— (-)	20 (7)	2 (2)	— (-)	— (-)	283 (248)	3 (11)				
South Coast Junction	...	34 (78)	2 (1)	38 (63)	9 (1)	119 (73)	9 (2)	141 (68)	2 (2)	46 (58)	1 (-)	82 (22)	— (3)	16 (38)	3 (3)	11 (1)	20 (-)	3 (-)	208 (-)	— (-)	— (-)	6 (-)	11 (5)	8 (3)	737 (410)	48 (16)					
TOTALS	...	4,235 (1,545)	9 (24)	4,155 (1,273)	39 (20)	3,813 (1,762)	24 (28)	3,543 (1,799)	8 (23)	3,798 (1,675)	9 (-)	397 (211)	11 (-)	128 (22)	11 (202)	103 (33)	39 (84)	142 (20)	10 (-)	449 (-)	8 (-)	141 (109)	33 (42)	25 (34)	20,937 (8,722)	217 (190)					

DISTRICT SANITATION :

Health Inspections. District Health Inspection represents basic control of environmental health factors and the Department's rapid recovery from war-time depletion is indicated by the increasing number of inspections carried out during the last three years :—

1945 — 23,721 ; 1946 — 38,146 ; 1947 — 44,043.

The Section's improvement programme rests very largely upon a building-constructional foundation. The continued shortage of essential building materials, combined with the diversion of labour to work of more pressing national importance, during and since the war, has naturally been reflected in structural deterioration and persistence of certain defects and deficiencies affecting the repair of dwellings, modernisation of food-shops and other trading premises (including boarding and lodging houses), permanent anti-rodent measures, provision of sanitary conveniences for non-European domestics, and extension of 'basic' sanitation to 'shack' housing areas.

A return to normality in the building industry will permit of a corresponding acceleration of the Department's efforts to overtake the outstandings.

Overcrowding and Unauthorised Dwellings. Gross overcrowding of recognised dwelling premises in the City is commonplace but by reason of the chronic housing position the Department, except on isolated occasions, is precluded from taking action which would only result in additional hardships.

Nevertheless, a close watch is being maintained on the unauthorised use of sub-floor spaces, garages, storerooms and suchlike structures, not approved by the City Council for the purpose of human habitation and conflicting generally with health requirements.

Dry-Cleaners, Dyers and Laundries. The new Public Health By-laws governing the conduct of Dry-Cleaners, Dyers and Laundry Establishments in the City were promulgated and became operative from 1st January, 1947.

Briefly, the effect of the new legislation will be to raise the standard of hygiene applicable to these businesses, to limit new concerns to sewered localities and to certain defined zones, wherein Offensive and Noisome Trades are permitted.

Mosquito Nuisances. Apart from the routine investigations of mosquito complaints and institution of remedial action, the Departmental mobile loud-speaker van was used to visit affected localities and to disseminate advice on the eradication and prevention of mosquito nuisances. In this way, many more householders can be contacted in a given period and much valuable time saved.

Rodent Control. Close attention has been paid to rodent control in the City generally but, more particularly, in the 'Plague-risk' areas contiguous to the harbour and in factories, food-shops and other premises affording special attraction or facilities for the harbourage of rodents.

Wherever evidence of conditions favourable to rat attraction or harbourage have been discovered, the necessary action has been taken to enforce the carrying out of remedial measures.

Regulations regarding the Prevention of Rodent Infestation of Dwellings and other Buildings and Premises. These draft regulations, published by the Minister of Health for general information and criticism, were closely examined and certain alterations were suggested to comply with local conditions.

Liability for Provision of Sanitary Conveniences, etc. An appeal to the Supreme Court by an owner of land, against his conviction in the local Magistrate's Court on two counts of contravening the City Public Health By-laws by failing to maintain a common yard in a cleanly state and the non-provision of suitable and sufficient privy accommodation for tenants, resulted in a judgment of considerable public health importance and dismissal of the appeal.

The case, which concerned premises situate in a shanty slum settlement, definitely placed the onus for insanitary conditions on this particular type of property upon the land owner, despite the fact that the dwelling structures had been erected and were owned by the occupiers.

Drainage of Premises : Sydenham Area. Shortly after the outbreak of war, City Council completed the sewer reticulation of a portion of the Sydenham Area on the reverse slope of the Berea Ridge and extending to Brickfield and Sparks Road.

A considerable number of properties were thus brought within the sewered area of the City but, on account of the scarcity and high cost of essential materials, connection to the sewers was not pressed during the period of hostilities.

Generally, sanitary conditions in the area concerned are very unsatisfactory due to defective pail privies and the absence of proper means for the disposal of waste water.

Although a number of properties have been drained, the majority of property owners have not taken advantage of the facilities provided and, as a first step, this Department has insisted upon sewer connections of trading premises as a pre-requisite to favourable reports on applications for licences.

However, it is considered that the time has now arrived when dwelling premises, of which there are many under multiple tenancy accommodating large numbers of people and conducted on lodging house lines, should be hygienically drained in the interest of public health.

The City and Water Engineer is now bringing pressure to bear upon property owners to make the necessary connections.

Cafes-de-Move-on. About a year ago, the City Council laid down a number of health requirements respecting cafes-de-move-on within the City and the necessary steps were taken to require compliance by proprietors of the existing businesses.

This Department has never viewed with favour the handling, preparation and sale of foodstuffs from cafes-de-move-on, on account of the impossibility of securing, in a mobile structure, the hygienic standards obtainable and demanded in respect of buildings. Latterly, there has been evidence of an increasing desire to conduct cafes-de-move-on in the City and, although most of the recent applications have not been approved by the City Council for one reason or another, extension of street trading in foodstuffs cannot be regarded with equanimity from a health viewpoint.

OTHER MATTERS OF HEALTH AND SANITATION :

Inspections by Health Inspectors :

Hotels, Boarding and Lodging Houses...	4,484	(3,364)
Restaurants, Tea-Rooms and Eating Houses	...	...	...	...	2,771	(2,167)
Bakeries	...	...	...	...	77	(79)
Butcheries	...	...	...	...	1,110	(1,252)
Dairies and Milk Depots	...	...	...	...	1,019	(1,997)
Launderies	...	...	...	...	404	(397)
Markets	...	...	...	...	317	(267)
Offensive Trades	...	...	...	...	115	(161)
General	...	...	...	...	33,706	(28,462)
European Health Assistants	...	...	...	...	23,548	(—)
Native Health Assistants ...	...	...	...	...	17,610	(—)
					<u>85,161</u>	<u>(38,146)</u>	
Complaints received and investigated	...	...	...	...	2,613	(3,071)
Notices issued : Personal	...	...	...	...	2,841	(2,139)
Written	...	...	...	...	4,849	(4,184)
Reports on applications for Licences	...	...	...	...	12,963	(11,605)
					<u>23,266</u>	<u>(20,999)</u>	

HYGIENE AND SANITATION AND BUILDING PLANS :

During the period under review, there has been further increase in activity in regard to the Building Trade and the position is steadily improving.

In addition to numerous preliminary lay-outs, the number of plans officially submitted to this Department was 2,830 as compared with 2,301 during 1945/46. Final approval was given in respect of 2,404 plans (£4,666,068).

Values, however, show a continued increase, the relative figures being as follows :—

1945/46	...	...	...	£3,555,965
1946/47	...	...	...	£4,666,068

DISTRIBUTION OF PLANS :

Old Borough	...	...	...	800	Mayville	...	...	...	...	400
Greenwood Park	...	...	...	643	Umhlatuzana	...	...	...	...	210
Sydenham	...	...	...	257	S. C. Junction	...	...	...	...	520
TOTAL : 2,830										

Normal site and building inspections were carried out in all parts of the City in co-operation with architects, owners and co-officials of the Municipal Service. Building schemes in embryo have often been examined and discussed in business offices.

Co-operation with other officials and the public has been a prime factor in attaining improvements, sometimes on matters without the scope of by-laws and regulations.

TABLES SHOWING PARTICULARS OF PLANS.

PLANS SUBMITTED DURING YEAR 1946-47 :

MONTH	OLD BOROUGH	GREENWOOD PARK	SYDENHAM	MAYVILLE	UMHLATUZANA	S.C. JUNCTION
1946 :						
July ...	75	44	14	25	19	32
August ...	68	49	14	26	13	46
September	72	59	16	27	12	43
October...	100	67	29	45	20	66
November	68	60	33	34	15	50
December	68	49	19	41	14	46
1947 :						
January...	48	34	19	29	11	37
February	86	75	32	39	14	45
March ...	41	55	11	28	16	41
April ...	59	35	21	29	27	44
May ...	42	45	20	32	16	40
June ...	73	71	29	45	33	30
TOTAL :	800	643	257	400	210	520
			GRAND TOTAL : 2,830			

Total plans submitted during year July, 1945 to June, 1946 — 2,301 as compared with 2,830 plans during 1946/7.

INDUSTRIAL HYGIENE :

Visits of inspection have been made to factories, departmental stores and shops, restaurants and public conveniences. The various managements have readily responded wherever complaints have been lodged and improvements suggested. Numerous repairs and minor changes have been effected. Suitable posters regarding personal hygiene have been affixed in rest-rooms and conveniences. Hairdressing establishments were visited to ascertain what type of sterilising equipment was being used.

CLEANSING SECTION (By courtesy of the City and Water Engineer) :

Cemeteries. The Municipal cemeteries were properly conducted and maintained. Private cemeteries were regularly inspected and were generally found to be well conducted and maintained in good order.

Interments. There were 6,862 burials in Municipal cemeteries and 1,018 in private cemeteries. The total of 7,880 compares with 7,839 in the previous year.

Cremations. Cremations during the year totalled 507 of which 375 were European and 132 Asiatic. The total for the previous year was 526.

Free Burials. 206 Free burials consisting of 7 Europeans, 6 mixed, 5 Asiatics and 188 Natives, were carried out during the year, as compared with a total of 193 for the previous year.

Conservancy. The number of pails in use at the end of the year was 12,064, being an increase of 924 over the previous year.

Refuse Removal and Disposal. The quantity of refuse removed during the year increased, and this is reflected in the total of 235,059 cubic yards as compared with 214,404 cubic yards removed during the previous year.

The disposal was carried out as in previous years ; a small proportion by incineration at the Point Destructor and the remainder by tipping on low-lying and swampy areas such as Harris Park on the south bank of the Umbilo River, Brickhill Road, Brickfield Road, and both banks of the Umgeni River.

Improved methods of fly control on Municipal Refuse Tips considerably reduced complaints during the year and the fly nuisance was negligible.

Street Cleaning. This service was carried out regularly and without interruption.

Street Washing. Experimental street washing on a small scale was undertaken towards the latter part of the year in the Central City and Beach areas and, in view of the excellent results obtained, it is intended to carry out large-scale operations when facilities become available.

Dead Animals. 382 Carcasses of dead animals were removed and disposed of during the year.

Public Conveniences. Due to the scarcity of building materials, only one new public convenience was constructed during the year. This was erected at Fynnland for the use of Europeans. The total number of public conveniences in the City, including those in public parks, etc., but excluding those on Government property at Railway Stations, is now 56 Europeans and 57 non-Europeans.

Barracks Management. Routine measures of administration and control were carried out as in the past. Repairs and maintenance operations were carried out by the Construction and Water Divisions, and by the City Electrical Engineer's Department throughout the year.

The construction of combination shower and water closets for each flat in the double-storey brick and hollow block sections of the barracks is proceeding.

Drama Hall. This building was constructed some nine years ago for free use of residents of the Barracks. It was utilised during the year for various functions such as free bi-weekly cinema shows, Committee meetings, dramas, weddings, Health Department lectures, etc., and during the school term by the pupils of the Magazine Barracks Free School.

Clinic. The giving of Health and Hygiene lectures to the Barracks residents, resulted in increased attendances at the Clinic during the year.

Sports Ground. The sports ground was improved during the year and was regularly used by the residents and their children for various sporting events.

Meat Supplies. The number of animals slaughtered during the year was as follows :—

BOVINES	SWINE	SHEEP & GOATS
63,668 (72,603)	29,394 (52,231)	238,466 (240,124)
Whole Carcasses Condemned :		
2,657 (2,611)	2,536 (3,776)	950 (1,387)
Portions of Carcasses in lb. weight :		
556,128 (735,286)	15,600 (11,817)	407,775 (580,705)

DAIRIES AND MILK

Total No. of Dairy Inspections ...	2,000
Written notices sent out with instructions to remedy certain defects within a stipulated time ...	522
Personal notices given to remedy minor defects ...	658
Chemical Tests : Total No. Tested ...	254
No. passed ...	252
No. Failed ...	2
Bacterial Tests : "Plate Count" : Total No. Tested ...	249
No. Passed ...	85
No. Failed ...	164
Biological Tests for Tuberculosis : Total No. Tested ...	90
No. Positive ...	2
No. Negative ...	88
Breed smear count or Microscopic Tests : Total No. Tested ...	1,328
Mastitis Tests : Total No. Tested ...	1,575
Sediment Disc Tests : Total No. Tested ...	2,347
No. Clean ...	1,205
No. Fair : Dirty : Very Dirty ...	1,142
Phosphatase Tests : Total No. Tested ...	502
No. Passed ...	464
No. Failed ...	38

Bang's Disease : Agglutination Tests :

TOTAL NO. OF HERDS TESTED	TOTAL NO. OF BOVINES TESTED	NO. POSITIVE	NO. SUSPICIOUS	NO. HAEMOLYSED	NO. NEGATIVE	% INFECTION
Herds Tested where Animals kept in close confinement :						
8	617	93	98	3	423	30.9
Herds which had access to open grazing Tested :						
12	346	8	13	2	323	6.1
20	963	101	111	5	746	22.0

Grading of Milk. Working on a baseline of 1 million organisms per c.c. (Breed Count) and a Good:Bad ration of 2:1 as a proposed standard, the following results were obtained :—

Milk from outside areas intended for pasteurisation :

Total No. of suppliers tested (only for the months of May and June) ...	169
No. of suppliers who "passed" proposed grade ...	135 i.e., $\pm 80\%$
No. of suppliers who "failed" proposed grade ...	34 i.e., $\pm 20\%$

Raw milk from Local Dairies :

Total No. of suppliers tested (only for month of June) ...	16
No. of suppliers who "passed" proposed grade ...	16 i.e., 100%
No. of suppliers who "failed" proposed grade ...	0

From the above, it is obvious that for the winter months, the proposed standard of 1 million organisms per c.c. is far too lenient. Furthermore, it has been established that the milk supplies from the outside areas are highly polluted with thermophilic and thermoduric organisms which survive and multiply causing decomposition and putrefaction of the pasteurised product. Every endeavour should be made to exercise more rigid control over milk supplies at their points of origin. The above illustrates the importance of testing milk supplies for grade conformity. These tests were carried out only once per week and upon only 185 supplies whereas they should be carried out daily (5 tests per week) on ± 700 suppliers.

The advantages of the Breed Count are that the test is rapid and informative, i.e., the appearance of organisms suggests the source of pollution. It also indicates the presence of mastitic and other cellular elements.

Routine clinical inspections were conducted in herds supplying raw milk. Microscopic examinations and bacteriological tests of samples of blood, milk, sputum, etc., were carried out for the detection of bovine diseases communicable to man, with the following results.

Bang's Disease : Contagious Abortion : Brucellosis : The incidence of this disease was found to be as high as $\pm 25\%$. It is noteworthy that the incidence of the disease was much higher in dairy herds located in the built-up areas where the animals are kept in close confinement and where the conditions for the spread of diseases are most favourable. On the other hand, in herds having access to open grazing, the percentage of infection was very much lower.

Tuberculosis : One herd, on two occasions, gave a positive biological test. However, it must be remembered the negative biological test means nothing as infected cows do not at all times excrete tubercle bacilli and secondly a sample is only taken from a bulk sample so that if only one or a few cows excrete bacilli, the chances of getting a positive biological test are very remote. For these reasons, the negative findings in the other herds are by no means an indication of absence of the disease. The only way of establishing the presence of infection is to carry out the tuberculin test on the entire herd and thereafter to conduct biological tests on every positive reactor, with certain disclosure of any active carrier present.

Mastitis : The incidence of this disease was found to be very high and wherever positive cases were found, they were eliminated.

Anthrax : One outbreak of Anthrax occurred at a local raw milk dairy. Before the release of milk, all necessary public health control measures, including inoculation of the herd and thorough disinfection of the dairy premises, were efficiently undertaken in consultation with the Government Veterinary Medical Officer.

FOOD HYGIENE SECTION :

Condemnations—City Market :

Apples	trays	10	Grapes	half lugs ...	778
Beans Green	pockets	159	Hares ... ... ...	...	6
Beans dried	bags	2	Mushrooms	trays ...	4
Buck	whole	12	Mulberries	box ...	5
Buck	lbs.	18	Onions	bags ...	21
Cabbages	lots	44	Peaches	trays ...	26
Cauliflower	lots	7	Peas, green ...	pockets ...	292
Carrots	bags	3	Pears	cases ...	4
Cherries	cartons ...	16	Pigs, wild ...	...	2
Cucumbers	pockets ...	4	Pigeons ... ...	...	33
Ducks dressed ...	...	50	Potatoes	bags ...	147
Doves, bush ...	...	110	Potatoes, sweet ...	bags ...	32
Eggs	dozen ...	223	Radishes ...	trays ...	1
Fowls, dressed ...	...	749	Tomatoes ...	trays ...	4
Guavas	trays ...	15	Tomatoes ...	box ...	5
Guinea Fowls ...	...	2	Turkeys, dressed ...	...	6
Giblets	lots	5	Venison ...	lbs. ...	1,908

Foodstuffs surrendered for examination and condemned :

Asparagus	tins	2	Baby food ...	lbs. ...	40
Baby powder	tins	2	Beans ...	bags ...	23
Beans baked	tins	27	Beef ...	lbs. ...	30
Beef steak pudding ...	tins	2	Beef extract ...	tins ...	188
Biltong	lbs.	38	Blancmange ...	packets ...	11
Brisket of Beef ...	cases ...	42	Butter ...	lbs. ...	4
Caviar	tins	479	Cabbage ...	bags ...	1
Candybars	box	25	Camppie ...	tins ...	6
Canadian dinner ...	tins	3	Cheese ...	tins ...	1
Chocolates	box	348	Chowchow ...	lots ...	28
Chutney	lots	14	Cornflour ...	packets ...	13
Coffee	packets ...	90	Coffee (60 lb. bag)	...	1
Crawfish tails ...	tins	1,309	Currants ...	box ...	9
Custard powder ...	packets ...	36	Cucumbers ...	tins ...	4
Curry powder ...	tins	26	Dates ...	box ...	2
Dripping (4 gall.) ...	tins	4	Fish ...	lb. ...	4,946
Fish mayonnaise ...	tins	3	Flour ...	packets ...	145
Flour	lb. ...	145	Fowls ...	...	35
Fruit	box	21	Fruit ...	tins ...	101
Gravy powder ...	tins	1	Ham ...	tins ...	3
Herrings	Kegs ...	1,211	Instant postam ...	tins ...	4
Jam assorted ...	tins	80	Jelly ...	cartons ...	218
Kaffircorn	bags ...	1	Kippers ...	lb. ...	470
Konfyt	Jars ...	5	Lactogen ...	tins ...	5
Lard	galls. ...	4	Maize ...	bags ...	2
Mackerell	tins	452	Marsh Mallows ...	lb. ...	5
Mealie Meal	bags ...	6	Meat Lunch ...	tins ...	4
Milk powder ...	cartons ...	55	Milk Condensed ...	tins ...	398
Muscats	packets ...	32	Mustard ...	jars ...	10
Nut Meal	bags ...	3	Onions ...	bags ...	33
Peas green	pockets ...	4	Peas ...	tins ...	12
Peppercorn	bags ...	6	Pickles ...	lots ...	21
Pilchards	tins	8	Potatoes ...	bags ...	41
Preserves	catons ...	1	Prunes ...	lb. ...	130
Raisins	packets ...	9	Sago ...	packets ...	1
Salt	bags ...	18	Salt ...	packets ...	1
Sandwich Paste ...	tins	26	Sardines ...	tins ...	2
Sausages	tins	52	Skate ...	lb. ...	150
Snoek	tins	3	Snoek ...	bags ...	1
Soles	lb. ...	5,500	Stew ...	tins ...	6
Sugar	pockets ...	40	Sugar Icing ...	tins ...	1
Steak	tins	4	Sultanas ...	box ...	4
Sweets	lb. ...	314	Sweets ...	cartons ...	86
Sweets	box ...	157	Tea ...	lb. ...	74
Turkeys ... ...	...	2	Tongues ...	tins ...	6
Tomato soup	tins	8	Syrup ...	2 lb. tins ...	2
Syrup	50 lb. tin ...	1	Vegetables ...	tins ...	1798
Vinegar	galls. ...	2			

Samples of Foodstuffs Taken (Food, Drugs and Disinfectants Act No. 13 of 1929).

ARTICLE	TOTAL	GENUINE	DEFICIENT	ACTION TAKEN
Cooking Oil	1	1	—	—
Chocolate	1	1	—	—
Cream	3	3	—	—
Curry Powder	5	5	—	—
Farm Butter	3	3	—	—
Honey	1	1	—	—
Ice Cream	13	12	1	Prosecuted : Fined £6.
Milk	274	268	6	Prosecuted : Fined £4, £4, £10, £35, £7 10s. 0d., £10.
Mixed Coffee	11	11	—	—
Olives	1	1	—	—
Pea Flour	1	1	—	—
Peppercorn	2	2	—	—
Sausages	3	3	—	—
Sugar	3	2	1	Prosecuted : Fined £2.
Rice	1	1	—	—
TOTAL	323	315	8	

FOODPOISONING :

The discovery of arsenic in market produce, caused this Local Authority to investigate the position and it was found that bags originally set aside for use as containers for fertilizer were being used for the conveyance of produce to various markets.

Samples of produce, etc., were sent to the City Analyst for arsenical content and, consequent upon this a variety of produce was condemned as unfit for human consumption.

The following is a schedule of produce analysed :—

ARTICLE	TOTAL	NEG.	Pos.	ARTICLE	TOTAL	NEG.	Pos.
Cabbage	1	1	—	Potatoes	1	1	—
Fertilizer	5	—	5	Potato dust	26	2	24
Finger Nails	1	1	—	Sacking	2	—	2
Hair	3	2	1	Salt, coarse	26	19	7
Madumbies	1	—	1	Sugar	1	1	—
Onion dust	3	3	—	Urine	1	1	—

WATER SUPPLY :

Chemical and Bacteriological Analysis :

(a) **Bacteriological.** The usual high standard was maintained throughout the year. Regular weekly bacteriological examinations were made at the Government Laboratory.

(b) **Chemical.** (Results expressed in parts of 100,000).

Colour	Good	Sediment	Nil
Turbidity ...	Nil	Reaction	0·7 alk.
Total Solids ...	...	...	10·84
Loss on Ignition ...	...	...	1·84
Chlorine ...	...	...	1·78
Nitrates ...	...	...	0·009
Nitrates ...	...	...	Nil
Saline Ammonia ...	...	...	0·002
Albuminoid Ammonia ...	...	...	0·006
Total Hardness ...	...	...	3·38
Permanent Hardness ...	...	...	1·43
Iron ...	...	...	Trace
Poisonous Metals ...	...	...	Nil

FAMILY HEALTH SECTION :

The statistical report of the Family Health Section for 1946-47 reflects a very large increase in the work carried out.

As compared with the previous year, the most notable features are :—

- (1) The total number of registered births has increased by 1,000.
- (2) The number of attendances at all Clinics has increased by 20,534 attendances.
- (3) The European Infantile Mortality Rate of 26·8 is the lowest on record.
- (4) Only one European case of death due to childbirth was registered.

Despite the greatly increased scope of the work, the number of medical and health visiting staff remained as before.

Family Health Service is largely adult health education applied to the health problems of the family as a unit. Were Health taught in schools in a manner suitable to the intelligence of different "standards" just as other important subjects are taught the onus and cost of adult health would be correspondingly lessened. Efforts to teach Health to women who are already mothers often ends in disappointment and it is even more disappointing to find that fathers equally ignorant of health requirements refuse to allow their wives to follow out what they have been taught at clinics.

At the beginning of this century members of the Scott Antarctic Expedition failed to return because the ration worked out for them was insufficient to maintain the vigorous health necessary to contend with the hardship of the Expedition. Yet even to-day the standard condition of health of many school entrants reflects a persistent ignorance of the fundamentals of sound nutrition.

That so little progress has been made in South Africa is largely due to a lack of co-ordination between the different services dealing with Child Health such as Midwifery, Infant Care, Nursery Schools, Child Guidance Clinics, Children's Hospitals—including immunisation and dental care, Children's Homes, Social Activities, Research, Training of Personnel, etc.

It is interesting to note that in England these two drawbacks to progress have been recognised and remedied. Of recent years Professorships in Child Health and Institutes of Child Health have been established for the purpose of co-ordinating Child Health Activities—which of course form the corner stones of all health activities—and a training for teachers of Child Health has been instituted which covers a reasonably comprehensive field for the purpose of teaching Health in schools and elsewhere.

The co-ordination of activities under these schemes embraces all preventive and curative agencies—including research and education. It is to be hoped that early progress will be made with the establishment of an Institute of Hygiene for the training of teachers and demonstrators of all education for both young and old.

Until such co-ordination of services can take place in South Africa it will always be possible to see cases of malnutrition occurring in families where wages are by no means below the bread line. A few months ago a family suffering from malnutrition was seen at a Durban Clinic where the father was in receipt of £60 a month—something which could not have happened had the parents been health-educated !

	EUROPEAN CLINICS			NON-EUROPEAN CLINICS					
	Gale Street	Mobile Clinics	Total	Brook Street and Gale Street Centres and Mobile Clinics				GRAND TOTAL	
				Coloured	Native	Asiatic	Total	1946-47	1945-46
Total Number of Sessions	265	606	871	115	204	548	867	1,738	1,658
Total Sessions for Children	231	606	837	104	204	450	758	1,595	1,514
No. of ante-natal sessions	22	—	22	11	—	98	109	131	132
No. of post-natal sessions	12	—	12	—	—	—	—	12	12
Total Attendance at Clinics	*14,473	32,946	47,419	8,383	18,556	30,947	57,886	105,305	84,771
New cases out of above number	2,171	2,301	4,472	704	4,126	5,791	10,621	15,093	12,416
No. of Infants under 1 year attending clinic	945	1,662	2,607	435	1,960	1,465	3,860	6,467	4,744
Total attendance of Infants	7,027	14,175	21,202	3,189	7,998	8,735	19,922	41,124	31,684
No. of toddlers and pre-school children attending clinic ...	498	1,372	1,870	324	549	1,235	2,108	3,978	3,341
Total attendance of toddlers and pre-school children...	3,441	10,709	14,150	3,141	2,844	9,529	15,514	29,664	26,444
No. of nursing mothers attending clinic ...	539	1,038	1,577	315	1,876	1,503	3,694	5,271	4,165
Total attendance of nursing mothers ...	3,701	8,062	11,763	1,993	7,725	9,211	18,929	30,692	22,986
No. of expectant mothers attending clinic ...	82	—	82	21	—	2,974	2,995	3,077	2,978
Total attendance of expectant mothers ...	169	—	169	60	—	3,459	3,519	3,688	3,525
No. of post-natal cases attending clinic ...	57	—	57	—	—	—	—	57	58
Total attendance of post-natal cases	140	—	140	—	—	—	—	140	100
No. of test feeds given	338	485	823	98	37	67	202	1,025	809
No. of mothers instructed in treatment of minor ailments	667	1,632	2,299	642	3,000	7,719	11,361	13,660	9,159
No. of health talks and demonstrations given	995	3,550	4,545	786	2,104	2,145	5,035	9,580	7,891

* Of this figure 954 were children attended to at Nursery Schools and Homes for Protected Infants.

NUMBER OF CASES.

	European	Coloured	Native	Asiatic
Referred to Doctors	96	—	—	4
" " Hospital	52	12	753	516
" " District Nurses	—	—	—	—
" " Societies	14	8	29	32
Passed for Day Nursery	113	2	7	—

EXAMINATION OF ENTRANTS TO SERVICE.

183 Female entrants to the Municipal Service were medically examined.

FOOD DISTRIBUTED.

	Gale Street and Mobile Clinics	Gale Street and Brook Street Centres and Mobile Clinics		
		Europeans	Coloured	Native	Asiatic
Number of cases receiving dried milk free	43	73	27	48
Amount of dried milk given free in lbs.	1,057	2,230	598	1,746
No. of cases receiving dried milk at cost and reduced prices	3	5	9	40
Amount of dried milk sold at cost and reduced prices in lbs.	38	60	202	1,229
Number of cases receiving cow's milk free	45	19	—	—
Amount of cow's milk given free in pints	13,441	5,613	—	—

BIRTHS.

Notifications :

	European	Coloured	Native	Asiatic	TOTAL	
					1946-47	1945-46
DURBAN	1,949	223	946	1,123	4,241	4,165
GREENWOOD PARK	269	16	127	469	881	759
SYDENHAM	54	86	227	751	1,118	868
MAYVILLE	71	69	919	934	1,993	1,946
UMHLATUZANA	181	16	135	188	520	473
SOUTH COAST JUNCTION	283	55	328	824	1,490	1,333
IMPORTED	2,807	465	2,682	4,289	10,243	9,544
	471	24	2,716	223	3,434	2,597
TOTAL	3,278	489	5,398	4,512	13,677	12,141

Number of Illegitimate Births occurring among those notified :

	European	Coloured	Native	Asiatic	Total
DURBAN	39	36	630	20	725
GREENWOOD PARK	2	5	72	7	86
SYDENHAM	3	20	132	13	168
MAYVILLE	—	14	491	18	523
UMHLATUZANA	2	2	74	—	78
SOUTH COAST JUNCTION	2	9	166	15	192
IMPORTED	48	86	1,565	73	1,772
	7	9	1,338	11	1,365
TOTAL	55	95	2,903	84	3,137

Stillbirths—Notifications :

	European	Coloured	Native	Asiatic	Total
DURBAN	35	5	67	39	146
GREENWOOD PARK	2	—	6	21	29
SYDENHAM	1	—	21	32	54
MAYVILLE	2	—	81	28	111
UMHLATUZANA	8	—	8	7	23
SOUTH COAST JUNCTION	1	—	19	22	42
IMPORTED	49	5	202	149	405
	4	1	166	10	181
TOTAL	53	6	368	159	586

Number of Illegitimate Stillbirths occurring among those notified.

	European	Coloured	Native	Asiatic	Total
DURBAN	1	—	47	—	48
GREENWOOD PARK	—	—	5	—	5
SYDENHAM	—	—	11	2	13
MAYVILLE	—	—	38	—	38
UMHLATUZANA	1	—	5	—	6
SOUTH COAST JUNCTION	—	—	12	2	14
IMPORTED	2	—	118	4	124
	—	1	87	—	88
TOTAL	2	1	205	4	212

Registrations :

	European	Coloured	Native	Asiatic	TOTAL	
					1946-47	1945-46
DURBAN	1,927	239	997	1,063	4,226	3,918
GREENWOOD PARK	273	21	153	557	1,004	892
SYDENHAM	61	109	241	920	1,331	1,201
MAYVILLE	71	84	992	1,026	2,173	2,066
UMHLATUZANA	163	22	153	325	663	660
SOUTH COAST JUNCTION	294	99	379	1,128	1,900	1,647
IMPORTED	2,789	574	2,915	5,019	11,297	10,384
	509	38	2,489	204	3,240	3,153
TOTAL	3,298	612	5,404	5,223	14,537	13,537

Number of Illegitimate Births occurring among those registered.

	European	Coloured	Native	Asiatic	Total
DURBAN ...	44	61	601	14	720
GREENWOOD PARK ...	5	8	90	3	106
SYDENHAM ...	3	30	138	15	186
MAYVILLE ...	3	23	468	17	511
UMHLATUZANA ...	2	6	73	4	85
SOUTH COAST JUNCTION ...	4	31	177	17	229
IMPORTED ...	61	159	1,547	70	1,837
	12	8	1,124	2	1,146
TOTAL ...	73	167	2,671	72	2,983

Stillbirths—Registered :

	European	Coloured	Native	Asiatic	Total
DURBAN ...	41	9	84	44	178
GREENWOOD PARK ...	2	—	13	30	45
SYDENHAM ...	1	—	21	38	60
MAYVILLE ...	2	2	155	47	206
UMHLATUZANA ...	8	—	18	15	41
SOUTH COAST JUNCTION ...	4	1	38	42	85
IMPORTED ...	58	12	329	216	615
	5	1	209	10	225
TOTAL ...	63	13	538	226	840

Number of Illegitimate Stillbirths occurring among those registered :

	European	Coloured	Native	Asiatic	Total
DURBAN ...	2	1	59	—	62
GREENWOOD PARK ...	—	—	7	—	7
SYDENHAM ...	—	—	11	—	11
MAYVILLE ...	—	1	76	—	77
UMHLATUZANA ...	1	—	7	—	8
SOUTH COAST JUNCTION ...	—	—	21	—	21
IMPORTED ...	3	2	181	—	186
	—	1	96	—	97
TOTAL ...	3	3	277	—	283

Stillbirth Rate or number of stillbirths per 1,000 live and stillbirths :

RACE	Number of Stillbirths	Number of Live Births	Total	Stillbirth Rate
EUROPEANS	58	2,789	2,847	20·3
COLOURED	12	574	586	20·4
NATIVES ...	329	2,915	3,244	101·4
ASIATICS ...	216	5,019	5,235	41·2

INFANTILE DEATHS.

	European	Coloured	Native	Asiatic	Total
DURBAN ...	58	15	165	80	318
GREENWOOD PARK ...	8	4	49	50	111
SYDENHAM ...	1	6	47	71	125
MAYVILLE ...	3	6	496	87	592
UMHLATUZANA ...	2	3	53	14	72
SOUTH COAST JUNCTION ...	3	12	142	101	258
IMPORTED ...	75	46	952	403	1,476
	15	2	444	13	474
TOTAL ...	90	48	1,396	416	1,950

Infantile Mortality Rate or number of infant deaths per 1,000 live births :

RACE	NUMBER OF DEATHS			NUMBER OF LIVE BIRTHS			MORTALITY RATE	
	Male	Female	Total	Male	Female	Total	1946-47	1945-46
EUROPEAN...	42	33	75	1,459	1,330	2,789	26.53	32.50
COLOURED...	30	16	46	301	273	574	81.88	102.08
NATIVE... ...	477	475	952	1,428	1,487	2,915	330.36	359.18
ASIATIC ...	224	179	403	2,478	2,541	5,019	80.69	90.83

Number of Infants who died who had previously attended clinic or had been visited by a health visitor :—

		European	Coloured	Native	Asiatic		
		1	7	8	6		

ATTENDED ONLY				HEALTH VISITED ONLY				HEALTH VISITED AND ATTENDED			
Europ.	Col.	Native	Asiatic	Europ.	Col.	Native	Asiatic	Europ.	Col.	Native	Asiatic
1	1	4	5	—	1	—	—	—	5	4	1

CAUSES OF INFANTILE DEATHS.

EUROPEANS :

CAUSE	WEEKS			MONTHS			TOTAL
	0-1	1-2	2-4	1-3	3-6	6-12	
Prematurity	33	3	—	1	—	—	37
Intra-cranial Haemorrhage	8	—	—	—	—	—	8
Other Birth Injuries	1	—	—	—	—	—	1
Malaena Neonatorum	1	—	—	—	—	—	1
Congenital Malformations	—	1	1	—	—	—	2
Congenital Atelectasis	2	—	—	—	—	—	2
Other diseases peculiar to Infancy	—	1	—	1	—	—	2
Gastro Enteritis	—	—	2	—	4	—	6
Diseases of the Heart	—	—	—	—	—	1	1
Broncho Pneumonia	—	—	—	4	1	1	6
Asthma	—	—	—	—	—	1	1
Tuberculous Meningitis	—	—	—	—	1	1	2
Measles	—	—	—	—	—	—	—
Natural Causes	3	—	—	—	—	2	5
Accidental Burns	—	—	—	—	—	1	1
TOTAL	48	5	3	6	6	7	75

COLOURED :

CAUSE	WEEKS			MONTHS			TOTAL
	0-1	1-2	2-4	1-3	3-6	6-12	
Prematurity	8	—	—	—	—	—	8
Congenital Malformations	1	—	—	—	—	—	1
Congenital Atelectasis	1	—	—	—	—	—	1
Congenital Debility	1	—	—	—	—	—	1
Other diseases peculiar to infancy ...	1	—	—	—	—	—	1
Gastro Enteritis	—	—	—	4	3	7	14
Bacillary Dysentery	—	—	—	—	1	—	1
Amoebic Dysentery	—	—	—	—	1	—	1
Broncho Pneumonia	—	1	—	4	3	4	12
Bronchitis	—	—	—	—	—	1	1
Miliary Tuberculosis	—	—	—	1	—	—	1
Measles	—	—	—	—	—	1	1
Meningitis	—	—	—	—	1	1	2
Natural Causes	—	—	—	1	—	—	1
TOTAL	12	1	—	10	9	14	46

NATIVES :

CAUSE	WEEKS			MONTHS			TOTAL
	0-1	1-2	2-4	1-3	3-6	6-12	
Prematurity ...	62	8	3	—	—	—	73
Intra-cranial Haemorrhage	25	—	—	1	—	—	26
Congenital Malformations	1	1	—	—	—	—	2
Congenital Atelectasis	4	—	—	—	—	—	4
Spina Bifida...	1	—	—	—	—	—	1
Other Birth Injuries	1	—	—	1	—	—	2
Tetanus Neonotorum...	3	7	—	1	—	—	11
Malaena Neonotorum	1	—	—	—	—	—	1
Congenital Debility ...	78	21	2	10	3	—	114
Other Diseases peculiar to Infancy	9	3	2	1	—	1	16
Gastro Enteritis ...	8	23	13	94	86	142	366
Amoebic Dysentery ...	—	—	—	1	1	3	5
Bacillary Dysentery ...	—	—	—	1	—	1	2
Dysentery (unspecified)	—	—	—	—	1	—	1
Malnutrition	—	3	9	22	13	20	67
Pellagra...	—	—	—	—	—	4	4
Rickets ...	—	—	—	1	—	—	1
Bronchitis	—	—	1	—	1	2	4
Broncho Pneumonia ...	8	8	4	35	52	53	160
Lobar Pneumonia ...	1	2	1	2	5	3	14
Pleurisy...	1	—	1	1	1	—	4
Pulmonary Tuberculosis	—	—	—	—	4	2	6
Miliary Tuberculosis ...	—	—	—	—	1	1	2
Tuberculous Meningitis	—	—	—	—	—	2	2
Diseases of Pharynx and Tonsils	—	—	—	—	1	—	1
Acholuric Jaundice	—	—	—	—	1	—	1
Status Lymphaticus ...	—	—	—	—	2	—	2
Congenital Syphilis	4	2	2	4	3	1	16
Diphtheria ...	—	—	—	—	—	2	2
Whooping Cough	—	—	—	—	—	2	2
Measles	—	—	—	—	—	4	4
Meningitis ...	—	—	—	—	1	1	2
Encephalitis ...	—	—	—	—	—	1	1
Convulsions	2	—	—	1	—	—	3
Pericarditis ...	—	—	—	—	1	—	1
Heart Failure	—	—	—	—	—	1	1
Infanticide ...	3	—	—	1	—	—	4
Accidental Burns	—	—	—	—	—	1	1
Natural Causes ...	10	5	1	3	2	2	23
TOTAL	222	83	39	180	177	251	952

ASIATICS :

CAUSE	WEEKS			MONTHS			TOTAL
	0-1	1-2	2-4	1-3	3-6	6-12	
Prematurity ...	44	3	3	1	1	—	52
Intra-cranial Haemorrhage	3	1	—	—	—	—	4
Congenital Malformations	2	2	—	1	—	—	5
Congenital Atelectasis	6	—	—	—	—	—	6
Congenital Debility ...	28	10	6	5	1	—	50
Other Diseases peculiar to Infancy	1	2	—	—	—	—	3
Gastro Enteritis ...	1	—	3	27	25	29	85
Bacillary Dysentery ...	—	—	—	—	1	—	1
Nephritis ...	—	—	—	—	2	—	2
Malnutrition	—	—	1	9	3	4	17
Rickets ...	—	—	—	1	1	—	2
Bronchitis ...	1	1	2	11	14	11	40
Broncho Pneumonia ...	2	—	2	27	26	28	85
Lobar Pneumonia ...	—	—	—	1	4	8	13
Pleurisy...	—	—	2	3	1	1	7
Pulmonary Embolism	—	—	—	—	—	1	1
Empyema ...	—	—	—	—	—	1	1
Coryza ...	—	—	1	2	1	—	4
Pulmonary Tuberculosis	—	—	—	—	—	1	1
Tuberculosis Meningitis	—	—	—	—	1	—	1
Meningitis ...	—	—	—	—	1	2	3
Encephalitis ...	—	—	—	—	—	1	1
Congenital Syphilis	1	2	—	—	—	—	3
Measles...	—	—	—	—	—	2	2
Diphtheria ...	—	—	—	—	1	—	1
Convulsions	—	—	—	—	1	1	2
Cellulitis	—	—	—	—	—	1	1
Accidental Burns	—	—	—	—	—	1	1
Natural Causes ...	2	3	2	—	—	2	9
TOTAL	91	25	23	87	83	94	403

FEEDING OF INFANTS WHO DIED FROM :

ENTERITIS :

	European	Coloured	Native	Asiatic	Total
Breast Fed	1	—	9	8	18
Breast Fed and Dried Milk	1	2	4	2	9
Breast Fed, Dried Milk and Cereal	1	—	—	—	1
Breast Fed, Dried Milk and Extras	—	3	1	—	4
Breast Fed and Sweetened Condensed Milk	—	—	—	2	2
Breast Fed and Cows' Milk	—	—	1	2	3
Breast Fed and Cereal	—	—	10	—	10
Breast Fed, Cows' Milk and Cereal	—	—	1	—	1
Breast Fed, Sweetened Condensed Milk & Cereal	—	1	—	—	1
Cows' Milk	—	—	—	3	3
Cows' Milk and Dried Milk	—	—	1	—	1
Dried Milk	—	—	3	4	7
Sweetened Condensed Milk	—	—	—	2	2
Sweetened Condensed Milk and Cereal	—	—	1	1	2
Cereal	—	—	2	—	2
Unable to Trace	3	8	333	61	405
	6	14	366	85	471

MALNUTRITION, PELLAGRA AND RICKETS :

	European	Coloured	Native	Asiatic	Total
Breast Fed	—	—	3	—	3
Breast Fed and Cereal	—	—	1	—	1
Breast Fed and Sweetened Condensed Milk	—	—	—	1	1
Dried Milk	—	—	2	1	3
Sweetened Condensed Milk	—	—	—	1	1
Unable to Trace	—	—	66	16	82
	—	—	72	19	91

MATERNAL MORTALITY :

	Number of Deaths from Causes Due to Childbirth	Number of Births			Death Rate Calculated on Live Births	Death Rate Calculated on Live and Stillbirths	
		Live	Still	Total		1946-47	1945-46
Europeans	1	2,789	58	2,847	.35	.35	1.69
Coloureds	1	574	12	586	1.74	1.7	3.92
Natives	15	2,915	329	3,244	5.1	4.6	7.88
Asiatics	23	5,019	216	5,235	4.5	4.5	2.34

Maternal Deaths attended by :

	European	Coloured	Native	Asiatic	Total
Doctor	—	—	—	3*(1)	3*(1)
Midwife	—	—	—	3	3
Born at home—removed to hospital	—	—	2	—	2
No midwife or doctor	—	—	—	3	3
Hospital or nursing home	1	1	7	12*(2)	21*(2)
No particulars	—	—	6	2	8
TOTAL	1	1	15	23*(3)	40*(3)

*() — Maternal deaths not registered.

Causes of Maternal Deaths :

	European	Coloured	Native	Asiatic	Total
Puerperal Sepsis	—	—	2	1	3
Toxaemia of Pregnancy	—	—	1	3*(1)	4*(1)
Eclampsia	—	—	1	5	6
Ruptured Fallopian Tube—Ectopic Gestation	—	—	1	—	1
Placenta Praevia (Ante-partum Haemorrhage)	—	—	1	4	5
Post-partum Haemorrhage	—	1	5	5*(1)	11*(1)
Abortion	—	—	1	1	2
Pulmonary Embolism	—	—	—	2	2
Paralytic Ileus following Caesarian Section	1	—	1	—	2
Acute yellow atrophy of liver	—	—	1	1	2
Lobar pneumonia	—	—	1	1*(1)	2*(1)
TOTAL	1	1	15	23*(3)	40*(3)

*() — Maternal deaths not registered.

SUPERVISION OF MIDWIVES.

Midwives :

	European	Coloured	Native	Asiatic	Total
No. of trained midwives practising in Durban ...	19	3	—	—	22
No. of trained midwives who have ceased to practise in Durban ...	4	—	—	—	4
No. of trained midwives unable to trace ...	—	—	—	—	—
No. of untrained midwives practising in Durban ...	6	2	—	131	139
No. of untrained midwives who have ceased to practise or who cannot be traced ...	—	—	—	4	4
No. of untrained midwives whose names have been removed from the List ...	—	—	—	—	—
No. of untrained midwives deceased ...	—	—	—	1	1
No. of women practising midwifery who have been warned not to do so unless they apply to have their names put on the List ...	1	—	—	7	8

Supervision of Midwives :

	European	Coloured	Native	Asiatic	Total
No. of midwives' appliances examined ...	68	25	—	1,130	1,223
No. of midwives' bags replenished ...	—	23	—	1,691	1,714
No. of midwives' dressings sterilised ...	—	31	—	2,347	2,378
No. of midwives' bags sterilised after septic cases ...	2	—	—	8	10
No. of visits to midwives at their homes or at patients' houses ...	3	4	—	35	42

Certificated practising midwives' registers are examined every three months and their appliances every six months.

Uncertificated practising European and Coloured midwives' appliances and registers are examined every three months.

Uncertificated practising Native and Indian midwives' appliances are examined every month.

Inspection of Registers of Nursing Homes and Lying-in-Homes :

	European	Coloured	Native	Asiatic	Total
No. of homes ...	13	—	2	1	16
No. of times homes visited ...	58	—	8	4	70

Ante-natal Work :

	European	Coloured	Native	Asiatic	Total
No. of expectant mothers attending clinic ...	82	21	—	2,974	3,077
Total attendance ...	169	60	—	3,459	3,688
No. of ante-natal sessions ...	22	11	—	98	131
No. of ante-natal visits ...	224	69	818	840	1,951
No. of post-natal visits ...	4	—	1	20	25
Other Visits :					
No. of cases of Puerperal Sepsis ...	2	2	—	2	6
No. of visits to cases of Puerperal Sepsis ...	2	2	—	2	6
No. of maternal deaths ...	1	1	15	23	40
No. of visits to maternal deaths ...	1	1	23	16	41
No. of cases of Ophthalmia Neonatorum ...	10	11	78	27	126
No. of visits to cases of Ophthalmia Neonatorum ...	26	27	148	56	257
No. of Stillbirths ...	11	5	179	153	348
No. of visits in connection with Stillbirths ...	11	5	186	175	377
Other visits ...	98	—	—	—	98

Ophthalmia Neonatorum :

Confinements attended by	European	Coloured	Native	Asiatic	Total
Hospital or Nursing Home ...	6	7	52	—	65
Doctor at home ...	1	—	—	—	1
Midwife at home ...	3	3	1	26	33
No. skilled attention ...	—	1	13	1	15
Insufficient address ...	—	—	12	—	12
	10	11	78	27	126

Causes of Disease :

	European	Coloured	Native	Asiatic	Total
Symptoms indicating maternal venereal disease	1	5	38	4	48
Other causes	9	6	40	23	78
	10	11	78	27	126
Referred to own doctor and hospital...	1	5	11	4	21
Already under hospital treatment	—	—	27	—	27
Treated by Clinic	9	6	40	23	78
	10	11	78	27	126

Ophthalmia Neonatorum Rate or number of cases of Ophthalmia Neonatorum per 1,000 live births :

	Number of Cases of Ophthalmia Neonatorum	Number of Live Births	Rate Calculated on Live Births
European	10	2,789	3.5
Coloured	11	574	19.1
Native	78	2,915	26.7
Asiatics	27	5,019	5.3.

IMMUNISATION

	European	Coloured	Native	Asiatic	Total
No. of cases immunised against Diphtheria	6,309	2,399	7,650	8,163	24,521
Completed the course	3,014	1,030	2,681	4,573	11,298
No. of cases immunised against Whooping Cough	3,107	232	18	16	3,373
Completed the course	984	45	5	3	1,037
No. of cases immunised against Typhoid	220	1,574	9,086	2,672	13,552
Completed the course	109	658	4,032	1,068	5,867
No. of cases vaccinated against Smallpox	2,213	303	11,512	2,387	16,415

N.B.—The direction of Immunisation was transferred to this Section in March, 1947.

HEALTH VISITORS' WORK.

Infants Under 1 Year :

	European	Coloured	Native	Asiatic	Total
First visits—Feeding { Breast	1,175	411	5,349	2,520	9,455
Mixed	123	27	470	222	842
Artificial	278	51	81	145	555
TOTAL	1,576	489	5,900	2,887	10,852
	European	Coloured	Native	Asiatic	Total
Re-visits—Feeding { Breast	1,428	423	607	3,110	5,568
Mixed	917	237	729	2,325	4,208
Artificial	1,869	354	138	613	2,974
TOTAL	4,214	1,014	1,474	6,048	12,750

Older Children :

	European	Coloured	Native	Asiatic	Total
First Visits	368	134	2,744	3,920	7,166
Re-visits	6,412	2,350	2,305	9,968	21,035
TOTAL	6,780	2,484	5,049	13,888	28,201
No. of above visits made to Protected Infants	191	64	—	—	255

Other Visits :

	European	Coloured	Native	Asiatic	Total
Infant Deaths ...	14	19	100	78	211
Infectious Diseases or Contacts ...	12	5	3	2	22
Reports on Insanitary Conditions ...	15	2	1	4	22
No. of visits to Nursery Schools and Homes for Protected Infants ...	48	—	—	2	50
TOTAL ...	89	26	104	86	305

Lectures and Demonstrations :

	European	Coloured	Native	Asiatic	Total
Lectures and Demonstrations to Expectant Mothers	20	—	—	—	20
Lectures and Demonstrations to Students ...	489	—	—	—	489
	509	—	—	—	509

Students :

	European	Coloured	Native	Asiatic	Total
University Students ...	14	—	—	—	14
Health Visitor Students ...	17	—	—	—	17
Domestic Science Students ...	8	—	—	—	8
	39	—	—	—	39

	European	Coloured	Native	Asiatic	Total
No. of Infants under 1 year Visited ...	2,217	745	6,418	3,912	13,292

TOTAL VISITS.

First Visits—Infants ...	10,852
Re-visits—Infants ...	12,750
Older Children ...	28,201
Other Visits ...	305
TOTAL ...	52,108

Dental Caries :

	European	Coloured	Native	Asiatic	Total
No. of children found to be suffering from dental caries ...	120	51	41	53	265
No. of cases of dental caries which received attention	75	14	16	14	119

PROSECUTIONS.

The subjoined table sets out the record of prosecutions instituted by the Department :—

	Brought Forward	New Cases	Total	Guilty	Not Guilty	With-drawn	Pen-ding	Fines
Public Health By-Laws.								
Nuisances :								
Use of food stores/shops for sleeping ...	—	6	6	6	—	—	—	£18 0 0
Unclean yards, drains, etc.	—	15	15	7	—	1	7	72 0 0
,, premises. (1) (2)	1	22	23	18	1	2	2	127 0 0
,, privies	—	3	3	3	—	—	—	15 0 0
Defective drains. (3)	—	5	5	5	—	—	—	13 0 0
,, privies	1	6	7	6	—	1	—	27 0 0
,, dwellings	2	16	18	11	1	—	6	61 10 0
Fly development	—	1	1	1	—	—	—	5 0 0
Unhygienic keeping of animals and pigs	—	3	3	2	—	—	1	9 0 0
Inadequate water supply	1	—	1	1	—	—	—	5 0 0
Lack of privy accommodation. (4) ...	—	4	4	2	—	—	2	7 0 0
Mosquito development	—	1	1	1	—	—	—	8 0 0
Hairdressers :								
Failure to wear overalls	—	3	3	3	—	—	—	8 0 0
Manufacture, Storage and Sale of Food :								
Unhygienic handling	—	3	3	2	—	—	1	10 0 0
,, delivery	—	2	2	2	—	—	—	10 0 0
Dairies and Milk Depots :								
Trading without registration	—	3	3	1	—	—	2	4 0 0
Illegal introduction of milk into Durban	2	—	2	1	—	1	—	5 0 0
Milk below bacterial standard	2	14	16	16	—	—	—	43 10 0
Illegal Sale	—	2	2	2	—	—	—	4 0 0
Unhygienic handling	—	8	8	5	1	—	2	17 0 0
Conveyance of water in milk van ...	—	1	1	1	—	—	—	6 0 0
Building By-Laws :								
Unauthorized housing	—	6	6	6	—	—	—	18 0 0
Public Health Act :								
Fumigation Regulations	—	1	1	—	1	—	—	—
Abattoir By-Laws :								
Unlawful introduction of meat into Durban	—	1	1	—	—	—	1	—
Slums Act :								
Zonal regulations	6	22	28	26	—	2	—	153 10 0
Food, Drugs and Disinfectants Act :								
Milk below chemical standard	1	5	6	6	—	—	—	70 10 0
Ice Cream	1	—	1	1	—	—	—	3 0 0
Contamination of Sugar	—	1	1	1	—	—	—	2 0 0
Contamination of Foodstuffs	—	1	1	1	—	—	—	3 0 0
	17	155	172	137	4	7	24	725 0 0
Previous Year	40	236	276	252	1	6	17	1,517 0 0

1. £25. Suspended. 3. £2. Suspended.
2. £10. Suspended. 4. £5. Suspended.

LABORATORY SERVICE (Report by the Municipal Pathologist) :

On 2nd September, 1946, a new arrangement was entered into, whereby the post of Consulting Pathologist was changed to that of Municipal Pathologist, and a monthly schedule of 390 tests was agreed upon—these tests to be undertaken in the private laboratory of the Pathologist.

In some months of the year the tests carried out were below the agreed schedule, in others well above it. Taken over the whole year including the months during which the new arrangement was operative, the total number of tests carried out was 3,730. In order to maintain the schedule figure, the Pathologist is, however, dependent on the Department sending him the required specimens.

The work undertaken fell, with a few exceptions, under the following heads :—

- (1) Vi-tests for Enteric 'carriers' among dairy personnel 1,611.
- (2) Tests for B. Abortus antibodies in dairy personnel 643.
- (3) Serological tests for Syphilis in dairy personnel 619, and V.D. contacts 18.
- (4) Culture and identification of growth of swabs from Diphtheria contacts 406.
 Culture and identification of growth of swabs from suspected 'carriers' of haemolytic streptococcus 6.
- (5) Stools from the Child Health Clinic for intestinal parasites 246.
- (6) Stools and urines for suspected 'carriers' of Enteric organisms 16.
- (7) Blood counts and cerebro-spinal fluid examinations from the infectious Disease Hospital 41.
- (8) Examination from time to time of foodstuffs suspected of being the cause of food poisoning outbreaks 27.
- (9) Waters and Milks 72.
- (10) Miscellaneous 25.

It might not be out of place here to calculate the value of this work at Government rates using the lowest charge all through, the figure arrived at is £1,958 5s. 0d. (One Thousand, Nine Hundred and Fifty-eight Pounds, Five Shillings).

Consultations. During the year, the Pathologist was called into consultation with the City Medical Officer of Health, the Deputy Medical Officer of Health and most of the other sectional heads of the Department. The Pathologist was also called to a monthly meeting (July) of the Public Health Committee, at which certain points relating to the schedule were discussed. It would appear that this had a salutary effect in the clarification of certain points.

Brucella Abortus Infection. Among the 643 routine tests for dairy personnel, not one positive was found. It should, however, be pointed out that none of these individuals were ill, and the tests were purely of a routine nature.

Amoebic Dysentery. There is only one point which can, with advantage, be stressed again. When further surveys are instituted into the cause of so much acute disease in the Bantu, it is more than probable that the increasing use of highly intoxicating liquor by these people will be established as one of the main causes. This does not mean that there is not also a nutritional factor. Moreover, the individual must carry the infection in the dormant state in the first instance.

Pasteurisation. The controversy which was raged over this question has somewhat lost sight of these further considerations:—

- (1) However careful the control of raw milk might be, the possibility of an explosive outbreak of Enteric Fever by milk-borne infection could never be ruled out.
- (2) When a Native milks a cow, his face is towards the open bucket, and if he coughs, infection may be imparted to the milk in droplet form. Such infection may be of human Tuberculosis, of haemolytic streptococci or of Vincent's organisms, to name only three. The risk in regard to virus disease is not clear when the vehicle is a liquid. On the other side, butter as a potential medium of infection seems to have been overlooked. It would be illogical to pasteurise all milk, and allow farm butter to be consumed. By farm butter, one means butter made from milk without the latter being previously pasteurised.

STAFF LIST :

The establishment of the Department consists of :—

Administration :

1	City Medical Officer of Health	...	...	...	...	Gunn, Dr. G. H. (M.D., Ch.B., D.P.H.)
1	Deputy City Medical Officer of Health	...	...	...	...	English, Dr. G. D. (M.B., Ch.B., D.P.H., D.M.T.)
1	Administrative Officer	...	...	...	...	Boutle, R. E. (R.S.I.)
1	Assistant Administrative Officer	...	...	...	...	Thomson, A. H. (R.S.I.)
1	Chief Clerk	...	...	...	...	Tedder, H. M. (R.S.I.)
6	Senior Clerks					
13	Clerical Assistants					
2	Lady Assistants					
1	Chief Typist					
1	Senior Typist					
9	Typists					
1	Enquiry Clerk					
Non-European :						
					1	Indian Office Assistant
					7	Indian Messengers

Epidemiology and Endemiology :

1 Assistant Medical Officer of Health Hooper, Dr. D. H., (M.B., Ch.B., D.P.H.)
 (and T.B. Officer)

1 Radiographer (Senior) **Non-European :**

1 Radiographer (Junior) 6 Indian Health Assistants

1 General Assistant 1 Senior Bantu Health Assistant

8 Bantu Health Assistants

Disinfecting Station, Ambulance and Laundry :

1 Superintendent
7 General Assistants

Non-European :
62 Indian Assistants
3 Bantu Ambulance Attendants

Health Inspection :

1 Assistant Medical Officer of Health	Edwards, Dr. H. S. (M.B., Ch.B., D.P.H.)
1 Veterinary Officer	Wessels, Dr. C. C. (M.R.C.V.S.)
1 Chief Health Inspector	Michie, A. A. (R.S.I.)
1 Deputy Chief Health Inspector	Bawden, F. G. (R.S.I.)
8 Health Inspectors (1st Grade)	
11 Health Inspectors (2nd Grade)	
9 Health Inspectors (3rd Grade)	
8 Assistant Health Inspectors	
12 Health Assistants	
2 Lady Assistants	
1 Assistant Chemist	

Health Visiting :

1 Chief Health Visitor
 1 Senior Health Visitor
 29 Health Visitors
 8 Clinic Assistants

Non-European :
 6 Indian Clinic Assistants
 5 Indian Messengers
 2 Bantu Nurses
 1 Bantu Cleaner

Family Health Services :

1 Assistant Medical Officer of Health McNeill, Dr. K. (M.B., Ch.B., D.P.H.)
1 Clinical Medical Officer Chapman, Dr. L. E. J. (M.B., Ch.B., B.Sc., D.P.H.)
1 Clinical Medical Officer (Vacant)
1 Physical Culturist
1 Municipal Pathologist Sampson, Dr. B. F. (M.R.C.S., L.R.C.P., M.B., B.Sc.)

Field Hygiene :

1 Health Inspector (allocated from Inspectorate)
 1 Senior Assistant Supervisor
 1 Assistant Supervisor
 5 General Assistants (1st Grade)
 8 General Assistants (2nd Grade)

Non-European :

3 Indian Sirdars
 6 Indian Field Assistants
 34 Indian Labourers
 8 Bantu Health Assistants
 29 Bantu Labourers

Non-European Health Services :

1 City Venereologist Wallace, Dr. G. D. H. (M.D., D.P.H., M.R.C.S., L.R.C.P.)
 1 Bantu Medical Officer Dhlamini, Dr. C. N. (M.D., L.R.C.P., L.R.F.P.S.)

Non-European :

1 Indian Health Assistant
 6 Bantu Health Assistants
 3 Bantu Clerks
 4 Bantu Nurses (Female)
 2 Bantu Laboratory Assistants
 1 Bantu Clinical Assistant
 3 Bantu Orderlies
 1 Bantu Cleaner

Health Education :

European staff drawn from other sections.
 1 General Assistant

Non-European :

1 Indian Health Assistant
 1 Bantu Lecturer
 2 Bantu Health Assistants

City Fever Hospital :

1 Assistant Medical Superintendent Casson, Dr. M. (M.D., M.R.C.S., L.R.C.P.)
 1 Matron Ewels, Miss E. M.
 1 Assistant Matron (Vacant)
 1 Night Superintendent (Vacant)
 6 Ward Sisters
 4 Staff Nurses
 1 Seamstress
 1 Cook Housekeeper

Non-European :

1 Indian Cook
 21 Indian Orderlies
 1 Indian Maid
 1 Indian Messenger
 7 Bantu Watchmen
 6 Bantu Maids
 4 Bantu Kitchen Attendants

REPORT B.**SLUMS AND HOUSING :**

Durban's housing problems are still acute due mainly to the continued restriction of building and high cost of building materials, coincident with a persistent and phenomenal influx of Natives and Indians into the City.

The most pressing problem is the housing of some 30,000 Natives, comprising about 6,000 families of which about 25,000 live in shanties in the Cato Manor (Booth Road) area. Overcrowded and lacking 'basic sanitation,' conditions in these shanty towns are highly conducive to the spread of Typhoid Fever, Dysentery, Typhus, Tuberculosis and Venereal Disease.

Housing Survey. The approximate estimates for the City's housing requirements are :—

Economic :		Dwellings (Houses or Flats)
European	...	3,000
Coloured	...	1,200
Asiatic	...	3,800
		<u>8,000</u>
Sub-Economic :		
European	...	500
Coloured	...	1,800
Native	...	7,200
Asiatic	...	14,000
		<u>23,500</u>

In the 1943/53 Current and Post-War Housing Programme, the City and Water Engineer has made provision to cover most of these requirements.

Slum Areas :

(a) **Central Areas.**—Council's emergency ban on demolition of dwellings has not yet been lifted, therefore Departmental action for removal of slum buildings cannot be undertaken.

As far as has been possible, matters affecting maintenance and repair of slum dwellings have been dealt with, nevertheless most of the slum buildings listed for demolition have long since reached the stage where the only solution is total reconstruction.

It is to be hoped that in the forthcoming year it will be possible to give effect in some measure to this matter, as there is no doubt that some property owners are taking advantage of this leniency and the acute housing shortage.

A certain few owners of defective premises in Defined Zones have obtained permission to demolish and rebuild as will be seen from the following summary.

Demolition	Replacements
11 Houses	(a) 5 blocks of flats involving 48 separate self contained flats. (b) 2 dwellings.

(b) **Suburban Areas.**—Little improvement has been possible in the 'outer areas' while the slum zones comprise the several 'Shanty Towns.' Until these settlements can be 'transplanted' to definite **controlled temporary housing areas**, provided with water and sanitation, no marked improvement can be expected in suburban slum zones.

Slum Zone 8 (Riverside).—situated on northern bank of the Umgeni River, has not changed materially due principally, as already stated, to lack of alternative housing accommodation.

Slum Zone 9.—The Booth Road Area, Mayville, still persists as a menace to the City. A recent survey revealed that approximately 25,000 Natives are living in about 2,600 shanties under the most grossly insanitary conditions.

Slum Zone 10 (Bluff Valley Area).—Very little change has taken place in this slum zone which is predominantly native. As with Booth Road, this Area will not be improved until suitable alternative areas for these shack dwellers are obtained and developed.

The Duranta Road shanty settlement, situated outside the Slum Zone and consisting of about 100 tin huts, has been practically eliminated.

This settlement which was a 'liquor shabean' was raided by the Police. Many of its occupants were gaoled, most of the shanties were demolished and the occupants have moved elsewhere.

Slum Zone 11.—The Karim Lane area, is virtually in the same condition as was last reported. Little improvement can be expected in this zone until the area is provided with sewerage.

Prosecutions.—26 prosecutions were instituted under the Slum Zone 1 Regulations. Fines imposed totalled £153 10s. 0d.

New Housing Estate.—During the year, progress with provision of New Municipal housing was recorded as follows :—

(1) European :

Partly Paid Land Housing Scheme—
No. of houses completed 344
No. of houses commenced 41

Flats for Ex-Volunteers—
Umbilo Road Completed 48
Selbourne Road Completed 78
Selbourne Road under Construction 120
Selbourne Road awaiting commencement 84

Flats for Women—
26 Rapson Road Completed 7
26 Rapson Road under Construction 48

Woodlands Housing Scheme—
Houses completed 149
Houses nearing completion 71

Sherwood and Virginia Estate Scheme—
Road hardening, stormwater drainage and sewerage works still in hand.

Currie Road—
Under construction 4 blocks of flats comprising 48 flats.

Burman Drive—
Under construction—6 blocks of flats.

(2) Indian :

Houses Completed 291

Magazine Barracks—
Work of providing separate water closet and bathing accommodation to each flat is well in hand.

(3) Coloured :

Sparks Estate—
Road hardening and stormwater drainage completed.

(4) Native—

Houses completed 1,265

Merebank Native Men's Hostel—
Five blocks completed, comprising 2,500 beds—2 blocks of dining rooms and kitchens completed. Completed scheme will accommodate 4,040 Natives.

Existing Native Housing Comprises :

- (a) Municipal villages and hostels ;
- (b) Industrial Compounds ;
- (c) Private residential premises ;
- (d) Slum settlements.

Municipal Native Housing Comprises :

1. (a) Locations for Housing Families—

Lamont	...	...	...	...	...	...	...	...	...	...	...	480 houses
Baumannville	...	...	...	...	...	...	...	...	...	...	...	120 "
Jacobs	...	...	...	...	...	...	...	...	...	...	...	64 "
Chesterville	...	...	...	...	...	...	...	...	...	...	...	1,265 "

(b) Locations for Native Males—

Somtseu Road	...	...	...	...	...	...	...	...	...	...	3,674 beds
Dalton Road	...	...	...	...	...	...	...	...	...	...	1,656 "
Jacobs	...	...	...	...	...	...	...	...	...	...	625 "

(c) Hostels for Native Males—

Bell Street	...	...	...	...	...	...	...	...	...	...	1,874 beds
Ordnance Road	...	...	...	...	...	...	...	...	...	...	440 "

(d) Hostels for Native Females—

Grey Street	...	...	...	...	...	...	...	...	...	...	520 beds
Jacobs	...	...	...	...	...	...	...	...	...	...	64 "

2. (a) Water Supply :—

	LOCATIONS			
	Lamont	Baumannville	Jacobs	Chesterville
Houses with water laid on	100	120	—	1,265
Houses with communal supply	380	—	64	Scheme Completed
No. of communal taps	31	—	4	—

NOTE.—On completion of water supply scheme at Lamont, communal water supply as at present will be abolished.

(b) Ablution, Washing and Sanitary Accommodation :—

	Lamont	Baumannville	Jacobs	Chesterville
Houses with showers	480	120	—	—
Houses with bathrooms	—	—	6	1,265
Showers for males	—	—	6	—
Showers for females	—	—	—	—
Washing gullies	380	120	2	1,265
Latrines (pail)	100	—	—	—
Latrines (pit)	170	—	—	—
Latrines (waterborne)	210	120	—	1,265
Latrines (for males)	—	—	6	—
Latrines (for females)	—	—	6	—

At Lamont Village, work on provision of full sewerage facilities is well advanced and this Sewerage and Water Scheme will also be supplied to the proposed additional 182 cottages under construction.

3. (a) Hostels for Males :—

	Lamont	Somtseu Road	Dalton Road	Bell Street	Jacobs	Ordnance Road
Latrines	—	235	66	60	72	13
Urinals	—	13	6	9	54	—
Showers	—	216	38	64	48	9
Washing Areas	—	21	11	24	5	3
Water taps	—	50	50	73	58	7
Fireplaces	—	62	26	15	16	15
Kitchens	100	10	5	—	1	—
Kitchen taps	—	24	17	—	7	—
Dining Halls	—	3	2	—	1	—

(b) Hostels for Females :—

	Grey Street	Jacobs
Latrines	37	5
Showers and baths	23	3
Washing areas	6	1
Water taps	42	8
Fireplaces	36	4
Kitchens	1	—
Kitchen taps	6	—
Dining Halls	1	—

4. **Proposed Additional Accommodation :—**

Lamont Location	1,265 houses
Merebank Hostel for males...	4,040 beds
Somtseu Road—additions	968 "
Jacobs—extensions	1,000 "

5. **Native Population** is estimated at 110,000.6. **Accommodation Other than Municipal :—**

(a) Industrial and commercial (excluding S.A.R. and Durban Corp.)	16,000
(b) Domestic Servants	22,000
(c) Licensed premises	12,000
(d) Shanty settlements	30,000
(e) Miscellaneous, including floating population	9,000

CONCLUSIONS :

- (a) The general housing shortage persists for all races ;
- (b) Influx of all races, principally Bantu is unabated ;
- (c) New housing programmes completed cannot cope with increase of population ;
- (d) There are approximately 30,000 Natives living in slum settlements ;
- (e) Approximate estimates of City's housing requirements are given ;
- (f) Notwithstanding existing restrictions the Regulations for the Control and Inspection of Premises in Defined Zones (framed under the Slums Act) continue to contribute to housing improvements in the Old Borough Slum Zones ;
- (g) There were twenty-six (26) prosecutions for breach of the Regulations during the year ; and
- (h) Progress with provision of new houses and flats is encouraging.

APPRECIATION :

I wish to express my appreciation of the loyal service rendered by my staff.

My thanks are also conveyed to you, Sir, and to the other members of the City Council for courtesy and assistance extended to me throughout the past year.

I have the honour to be,

Ladies and Gentlemen,

Your obedient servant,

G. H. GUNN, M.D., Ch.B., D.P.H.

City Medical Officer of Health.

